RELATIONSHIPS BETWEEN READING ACHIEVEMENT AND FACTORS OF INTELLIGENCE AND PERSONALITY ADJUSTMENT OF FOURTH GRADE PUPILS

A THESIS

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DEDICATION

To

My Aunt, Mrs. Beulah A. Lewis

For

Her Faith, Consideration, and Reassurance

A. A. W.

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The writer wishes to express sincere gratitude and appreciation to everyone whose assistance and effort made possible the completion of this research. Special thanks to Rev. W. J. Rowe, my principal, teachers, and pupils of the Edwin Posey Johnson Elementary School, who so generously gave their time and assistance in different ways.

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A. A. W.

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CHAPTER I

INTRODUCTION

Rationale.-- Reading concerns more Americans today than any phase of learning activity except scientific experiments involving nuclear testing, putting men into space, and the latest production of telestar.

Since reading is the chief means of learning, the task of teaching reading to children has claimed the attention of school administrators, teachers, parents, and reading experts for many years. Innumerable books have been written on the subject, while controversial literature appears monthly.

In defining reading Hildreth states:

> Reading is the mental process involved in the interpretation of printed material through specific form of learned behavior which requires grasping meaning through associations which have been formed between oral experiences and the printed sentence constructions.[1]

Because of the complexity of the reading process, a wide range of capacities, abilities, needs and interests exists among the pupils by the time they reach the intermediate grades. It is the feeling

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[1]Gertrude Hildreth, Teaching Reading (New York: Henry Holt and Company, 1958), p. 2.

of teachers that if these factors, which are involved, were studied, the evidence obtained would help them work more effectively in aiding pupils acquire their optimum growth in reading.

In making an appraisal of a pupil's reading, the teacher must determine his capacity and achievement level, using intelligence quotients and achievement test scores, and his social adjustment as among the factors which should be considered. While these are not all of the factors involved in the stages of learning to read, they are among the important factors. DeBoer and Dallman report:

> Factors important to growth in reading are often classified into these four groups: (1) mental (2) physical (3) social and emotional, and (4) educational.[1]

An appraisal will enable the teacher to see the interrelationship of these factors and their significance in child growth.

From a large body of information collected about reading readiness, most writers agree that it depends upon (1) physical factors such as the ability to see words clearly, (2) mental factors such as the ability to follow an easy sequence of events in a story, (3) social and emotional factors such as an interest in reading.[2]

To understand an intermediate pupil's problem based on these factors, one must realize what goes on in the teaching of reading

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[1]John J. DeBoer and Martha Dallman, The Teaching of Reading (New York: Henry Holt Company, 1960), p. 10.

[2]David H. Russell, Children Learn to Read (Boston: Ginn and Company, 1961), p. 167.

before the child reaches the intermediate grades. Formal reading begins in the primary grades where the goal of initial reading instruction includes the development of interests which foster reading activities, the promotion of oral language facility, the development of basic notions regarding the relationship between visual symbols (words), and experience, and the development of basic skills and abilities including a serviceable sight vocabulary.[1] It is at this time when the pupil begins to receive a more meaningful approach to the whole process of reading. It has been during this time, the pupil has learned by asking questions, studying pictures, hearing explanations, talking, and working with materials in order to obtain meaning of printed symbols.

When the pupil reaches the intermediate grades, reading takes on a different meaning to him. It is done in order to gain first hand knowledge of the world in which he lives, a solutions to his own problems, of forming judgements, and of making evaluations.

By the time the child reaches fourth grade, he should have achieved independence in reading and study habits, have a better background in linguistic skill, have more mental maturity, and have a richer background of experience as a basis for learning.[2] These expectations have not always been fulfilled, for reading is a task which must be perceived when one is ready; it is a task that our culture has imposed in order that one might have or enjoy a more satisfying life; it

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[1]E. A. Betts, Foundations of Reading Instruction (New York: 1957), p. 434.

[2]Gertrude Hildreth, Teaching Reading (New York: Henry Holt and Company, 1958), p. 2.

is a slow learning process which cannot be forced but guided through the efforts motivated by the teacher and parent, and by the willingness of the child to learn.

In the event the pupil has not been able to achieve in reading by the pattern set up by authorities because of his differences from the usual child, an instructional problem has been created. The same factors which have been contributing to successful achievement in readinf for some pupils may be the ones which have prohibited reading achievement in others by their lack of mental capacity; impaired physical conditions; and social and emotional maladjustment, in the reading situation. It is with these ideas in mind that the writer felt the importance of doing the study.

Evolution of the Problem.-- During the second semester of the school year, 1961 - 62, the writer was enrolled in a class in Reading Difficulties at Atlanta University, Atlanta, Georgia. It was in this class that she increased her awareness of the causes of the many reading disabilities and the factors which contributed to these causes. The writer also felt that since reading had been an experimental and a well-discussed problem in her particular school where pupils indicated low achievement on standardized tests, there was a need for determining some of these causes which might be contributing factors toward the solution of the particular problem.

With a knowledge of the factors which will bring desired results in reading achievement and those which will retard achievement therein, the writer was led to want to study some pupils who were achieving, in order to determine whether they were at their fullest potential and whether some who were not achieving were victims of certain factors

that were aiding in their retardation.

The writer was interested in doing this study with children at the intermediate level because difficulties are brought to focus more at this level than at any other. It was felt, further, that if these difficulties were studied and causes were determined, correction at this level would help alleviate frustration as pupils reach higher grades.

Contribution to Educational Knowledge.-- Since reading has been an outstanding subject for discussion at the Edwin Posey Johnson Elementary School, it was felt that this research study would be of special value to the elementary school personnel, as well as to the administrative heads in determining whether pupils studied in this particular fourth grade class were achieving in reading according to their mental capacities and abilities, in spite of, or, because of their personal and social adjustment.

Further, it was hoped that this study would make more teachers aware of these factors, thereby, giving them as incentive to want to study each pupil in their particular classes to help them plan to reach each child and help in the development of his potential growth.

Statement of the Problem.-- The problem involved in this study was to determine the relationship, if any, between reading achievement and intelligence and personality adjustment of a select group of high and low achievers in the fourth grade at the Edwin Posey Johnson Elementary School, Atlanta, Georgia.

Purpose of the Study.-- The basic purpose of this study was to relate reading achievement to intelligence and personality adjustment of select groups of high and low achievers.

More specifically, the purposes of this research were:

1. To determine the reading status of the select group of high and low achievers in the fourth grade at the Edwin Posey Johnson Elementary School, Atlanta, Georgia.

2. To determine the personality adjustment levels of the select group of high and low achievers in the fourth grade at the Edwin Posey Johnson Elementary School which might relate to reading achievement.

3. To determine the expectancy level in reading of the select group of fourth grade high achievers and low achievers in the Edwin Posey Johnson Elementary School.

4. To determine the relationships of the foregoing factors to reading achievement.

5. To determine to what extent these findings, implications, and recommendations derived from an analysis and interpretations of the data which may be useful in the specific fourth grade class and in similar situations wherever the findings are pertinent.

Limitations of this Study.-- This study was limited to the factors involved in determining the relationship between the intelligence, personality adjustment, and reading achievement in the select group of fifty pupils in the fourth grade of Edwin Posey Johnson Elementary School, Atlanta, Georgia for the year 1962 - 63. Also, this study was limited in that only one test in each of the areas was used to determine the levels of intelligence, personality adjustment and achievement, whereas, two or more tests for each variable might have made the study more valid.

Definition of Terms.-- For the purpose of this study the following terms carried the meaning ascribed to them.

1. The term "intelligence," the ability to learn and understand, used in this study referred to the level of mental development which was measured by the Kuhlmann-Anderson Intelligence Test.[1]

2. The term "personality development," which refers to the intangible elements of the total complex patterns of feeling, thinking and acting,[2] used in this study referred to those aspects of personal and social adjustment of students as measured by the California Test of Personality.[3]

3. The term "reading achievement," which refers to the reading ability achieved through the use of skills employed in this study referred to the reading level of accomplishments of students as measured by the Stanford Achievement Reading Test.[4]

4. The term "high achievers," used in this study referred to pupils whose scores were above the median on the Stanford Achievement Test.[5]

5. The term "low achievers," used in this study referred to the pupils whose scores were below the median on the Stanford Achievement Reading Test.[6]

6. The term "expectancy," in this study referred to the level of reading achievement expected of the select pupils

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[1]F. Kuhlmann and R. G. Anderson, Kuhlmann-Anderson Test, Sixth Edition, (Minneaoplis: Educational Test Bureau, 1952).

[2]I. L. Maymon, "The Relationship Among Reading Ability Vocabulary, Intelligence, and Adjustment of Sixty-two Eighth Grade Pupils." (Unpublished Master's Thesis, Atlanta University, 1962), p. 7.

[3]W. W. Clark, E. W. Tiegs, and Louis R. Thorpe, California Test of Personality, (Monterey, California: California Test Bureau, 1953).

[4]T. L. Kelly, Richard Madden, E. F. Gardner, L. M. Terman, Giles Ruch, Stanford Achievement Reading Test, Form K (New York: World Book Company, 1953).

[5]Ibid.

[6]Ibid.

as was found from the Bond and Tinker formula for finding levels of expectancy.[1]

Method of Research.-- In this study the Descriptive-Survey Method of research was used employing the techniques of testing and documentary analysis.

Locale of the Study.-- The Edwin Posey Johnson Elementary School is located at 494 Martin Street in the southeastern section of Atlanta, known to many as the "Summerhill" area, which is Georgia's capital and major city.

The school is one of the oldest elementary schools in the City of Atlanta, but continues to be attractive in architecture and general appearance, spacious in classroom and service accommodations, enabling such techniques as this study utilized.

During the school year, 1962 - 63, approximately eleven hundred pupils were enrolled at this school. Most of these pupils lived within a radius of a mile of the school and come from families representing a low income status.

The faculty and staff included a principal, twenty-nine classroom teachers, a music teacher, a librarian, three teachers of special education, a physical education teacher, a counselor, two secretaries, five cafeteria workers, two custodians, and three maids.

The grade distribution of the school was from kindergarten through seventh. The curriculum was planned in accordance with city and state requirements. Diversified extra-curricular activities were

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[1]Guy L. Bond, Miles A. Tinker, Reading Difficulties (New York: Appleton-Century-Crofts, Inc., 1957), p. 79

carried on for pupils on all grade levels.

The locale in which this study was conducted had adequate facilities, such as seating, lighting, heating and ventilation, along with appropriate materials for conducting a study of this nature.

Subjects.-- The subjects of this study were selected fourth grade pupils of the Edwin Posey Johnson Elementary School, Atlanta, Georgia. There were fifty pupils participating in this study, twenty-five who were low achievers and twenty-five who were the high achievers, ranging from ages 7 to 11 years.

Description of Instruments.-- The instruments used for gathering the basic data needed for this study were: The Stanford Achievement Reading Test, (Elementary Battery, Form K) by T. L. Kelly, Richard Madden, Eric F. Gardner, Lewis M. Terman, and Giles Ruch, The Kuhlmann-Anderson Intelligence Test D, Sixth Edition, by F. Kuhlmann- and Rose Anderson, The California Test of Personality, (1953 Revision, Form AA) devised by Louis P. Thorpe, Willis W. Clark, and Earnest W. Tiegs.

Buros reports that tests of the Stanford Achievement Test are designed to measure two aspects of reading achievement: comprehension and word meaning.[1]

At the elementary level for which the test is designed the paragraph meaning section begins with simple sentences and progresses to longer and more difficult paragraphs with the omission of words to be

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[1] O. K. Buros (ed.), The Fourth Mental Measurement Yearbook (Highland Park: The Gryphon Press, 1959), pp. 654-655.

filled in by the testee with four alternate words using 40 to 50 separate items. The section on vocabulary uses the completion of sentences with 35 to 50 words. Definitions or synonyms are used to complete the sentences.

The format of the test, according to the reviewers is good and the type clear. Directions and scoring are unambiguous.

Norms are based on 350,000 pupils selected for all areas, types of systems and socio-economic levels.

Validity of the tests is based on:

> The content of the typical elementary school curriculum, in addition to extensive experimentation prior to publication. Split-half reliabilities of the two parts for the grades 3 - 9 range from .82 to .92 with half of them over .90. The reliability is therefore satisfactory. These tests are among the best survey tests of reading achievement for the elementary grades. The format and content, the standardization and norms, the ease of administering and scoring - all contribute to the conclusion that this is a dependable gross measure of reading achievement.[1]

The Kuhlmann-Anderson Tests are among the best all-round group of intelligence tests.[2] They have as their purpose the measurement of the mental development of pupils in Grade IV. A battery of ten sub-tests is included in this form. Each of these tests is individually standardized, and mental age equivalent scores are provided for evaluating performance on it. Each test is scored by counting the number of correct responses. After the mental age equivalents have been obtained for all the ten subtests, the median

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[1] Ibid., p. 456.

[2] Ibid.

mental age for the battery is computed. This median mental age is then divided by the pupil's chronological age to obtain the intelligence quotient of the subject.

These subtests are numbered and arranged in ascending order of difficulty. Each test has samples for practice with proper directions. Validity is defined in terms of discriminative capacity, that is of the ability of tests to detect difference in mental development over the age range covered. Split-halves reliability coefficients range from .88 to .97.[1]

The California Test of Personality was designed to identify and reveal the status of certain important factors of personality and social adjustment which are usually designated as "intangibles" and are not appraised or diagnosed by means of ordinary ability and achievement tests. It is a teaching - learning or developmental instrument, purposely providing data for aiding pupils to maintain or develop a normal balance between personal and social adjustment. Personal adjustment is assumed to be based on feelings of social security. There are six components of special behavioral pattern under each division of adjustment giving a Total Adjustment Score. They are social standards, social skills, anti-social tendencies, family relations, school relations, occupational relations and community relations which are the components measured under Social Adjustment. The components measured under Personal Adjustment are self-reliance, sense of personal worth, sense of personal freedom, feeling of belonging, withdrawing tendencies and nervous symptoms. Percentile norms and total raw scores are provided

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[1]Kuhlmann-Anderson Tests, Master Manual, pp. 7-9.

for each component.

Reliability and Validity of the data are given for the sub-sections and totals of the test in terms of raw scores for the various levels.[1]

Research Procedure.-- This study was conducted through the following procedural steps:

1. A review, summation and presention of related literature pertinent to this research were made.

2. The approval of the proper school officials to conduct the study and to use previously acquired test data of the Stanford Achievement Reading Test scores and the Kuhlmann-Anderson Intelligence Test scores was secured.

3. The California Test of Personality was administered.

4. The data secured from the test measures were set forth in appropriate tables and figures; and statistically treated through such measures as: the mean, median, standard deviation, standard error of the mean, and the correlation for "r".

5. The findings, conclusions, implications and recommendations derived from the analysis and interpretation of the data were formulated and incorporated in the finished thesis copy.

Survey of Related Literature.-- The literature pertinent to this study revealed that attention has been given to the importance of the factors which are involved as they relate to reading achievement. Information found to be related to the present study was reviewed under the following: Personality Adjustment and Reading Achievement and Intelligence and Reading Achievement.

Consideration of the research on personality adjustment and reading achievement revealed that most authors agree that certain

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[1] California Test of Personality, Manual of Directions, Complete Battery, p. 4.

factors of personality adjustment are related to reading achievement. In order to understand that there are varying concepts of the interpretation of what personality really is as has been reported by Crow and Crow, who state:

> Concepts of personality range from concern with but one or two characteristics to an attempted explanation of personality as a combination of vague intangible qualities. The word personality often used to describe a person's physical appearance, form of speech or manner, or the amount of "it," "oomph," or glamour he possesses. To some people, personality is that something with which an individual is born, which is unaffected by environmental influences, and which permeates all his actions. Others regard an individual's personality as the person himself. Still others conceive personality as representing forms of behavior responses to particular situations.[1]

Allport, in the same connection states his definition thusly:

> Personality is the dynamic organization within the individual of those psychophysical systems that determine his unique adjustments to his environment.[2]

Studies made on reading achievement and personality adjustment seem to lend pertinent information and are related to the problem. Ladd found a slight but unreliable tendency for poor readers to have less satisfactory personality adjustment.[3] In this connection, after

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[1]Lester Crow and Alice Crow, Educational Psychology (New York: American Book Company, 1954), pp. 184-188.

[2]Allport, G. W., Personality: A Psychological Interpretation, New York: Henry Holt Company, 1937, p. 48.

[3]M. R. Ladd, "The Relation of Social, Economic and Personal Characteristics in Reading Ability," (New York: Bureau of Publications, Teachers College, Columbia University, 1933).

reviewing reports from remedial reading teachers, research students and regular classroom teachers, Burton and Associates found that:

> From the assumption of these other authorities the belief that emotional disturbances precede and cause reading difficulties are one of the symptoms of inadequate personality adjustment. While other authorities believe that emotional disturbances affecting reading ability arise from reading difficulties themselves or from unpleasant experiences with reading.[1]

Spache found that much of the current literature in the area of reading confirms the presence of a rather high proportion of emotional and personality problems among retarded readers.[2]

Harris also contends that:

> Failure in school is in many cases intimately connected with the child's total personal and emotional adjustment. In some cases an emotional problem is present before the child entered the first grade has persistently interfered with concentration, attention, and motivation. In other cases, failure in the attempt to learn to read produces gradually increasing discouragement, the child tends after a while to try to avoid or evade reading, and is likely to become upset and confused when he cannot escape from reading. Whichever comes first, the emotional problem or the learning problem is of little importance. A vicious cycle becomes established in which each bad experience with reading produces unpleasant feelings, and the emotion of fear, anger, shame, or embarrassment interferes with clear thinking and makes it even more difficult for the child to learn

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[1]William Burton et al, Reading in Child Development, Indianapolis, The Bobbs-Merrill Company, Inc., p. 553.

[2]George Spache, "Personality Patterns of Retarded Readers," Journal of Educational Research. February, 1957.

in a reading situation.[1]

Neal in the study she made to determine the relationship of intelligence, personality traits and achievement of sixth grade pupils found there was significant relationship between personality as a whole and intelligence as a whole.[2]

Christie made a study to determine the relationship between certain traits of personality and reading achievement among fourth grade students and found there was a substantial degree of relationship between personality adjustment and reading achievement.[3]

In this same connection Oakley in her study to determine the relationship between intelligence, personality and achievement found a significant positive relationship between personality as a whole and achievement as a whole and significant relationships between certain aspects of personality and certain phases of achievement also. However, in her study the achievement of the group did not come up to the grade placement in any area tested.[4]

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[1]Albert J. Harris, Effective Teaching of Reading (New York: David McKay Company, 1963), p. 319.

[2]Naomi Adger Neal, "A Comparative Study of the Relationship of Intelligence, Personality, Traits and Achievement of the Sixth Grade Pupils of the Scott's Branch Elementary School, Summerton, South Carolina, July, 1959, p. 32.

[3]Ruby J. R. Christie, "A Study to Determine the Relationship, If Any, Between Certain Measured Traits of Personality and Reading Achievement of Seventy-five Pupils in the Fourth Grade of the Macbeth Elementary School, Union, South Carolina, 1952, p. 56.

[4]Andolia V. Oakley, "A Study of the Relationship Between Personality, Intelligence and Academic Achievement of Forty-five Eighth Grade Pupils of Toler High School, Granville, North Carolina." August, 1950, p. 62.

Teigs in his study stated his experiences with the California Test of Personality indicates:

> That reading difficulties constitute a major cause of maladjustments in school. Inability to succeed because of inadequate reading ability caused children to excel in more serious anti-social forms of misbehavior. Some develop negative attitudes while others suffer inferiorities, or retreat through feigned illnesses or bids for sympathy.[1]

Similarly Norman and Daley made a comparison of scores on the California Test of Personality between forty-two superior and inferior readers among sixth grade boys.[2] Analysis of variance revealed no differences in pattern, however, the superior readers had high adjustment scores. Keshian also used the California Test of Personality to determine if there was a personality pattern common to seventy-two successful readers in a fifth grade class. He was concerned only with children whose reading ages were equal to or superior to their mental ages. He found as did Norman and Daley, that successful readers tend to score high on personality factors. Furthermore, he found no single personality pattern revealed by the tests.[3]

In referring to "non-achievers" in reading, Bond and Tinker noted that in many cases, the child becomes frustrated over his inability to

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[1]Earnest W. Teigs, "Diagnosis in the Reading Program, Educational Bulletin, No. 10. (1945), p. 2.

[2]Ralph D. Norman and Marvin F. Daley, "The Comparative Study of the Personality Adjustment of Superior and Inferior Readers," Journal of Educational Psychology, Volume 50, (February, 1959), pp. 31-36.

[3]Jerry G. Keshian, "Is There a Personality Pattern Common to Successful Readers?" Elementary English, Volume 39, March, 1962, pp. 229-230.

read that his personal adjustment suffers a severe shock.[1]

They further stated:

> That the low achiever is quite apt to show emotional tensions in reading situations which may upset him completely as he demonstrates unfortunate adjustment patterns. These adjustment patterns may vary all the way from unfounded excuses for his trouble with reading to rather severe functional emotional disorders.

Gosier found that there was no significant difference between personality adjustment of pupils with higher and lower levels of intelligence except personal worth and social standards, wherein, there was a slight difference in favor of high ranking pupils. She found a significant difference between reading comprehension abilities with higher and lower levels of intelligence, no relationship between personality adjustment of reading comprehension of the different levels, and no relationship between personality adjustment and reading adjustment and reading comprehension of the pupils of the different levels except in personal adjustment and learning to read directions.[2]

Recent studies of child development reveal reading achievement as an aspect of the total growth of children. McKim studied reading problems and decided that progress in reading needs should be appraised with maturity, the range of potential abilities, and with the total growth needs of a class in mind. She contends:

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[1]Guy L. Bond and Miles A. Tinker, Reading Difficulties, Their Diagnosis and Correction, (New York: Appleton-Century-Crofts, In.), p. 68.

[2]Margaret Burton Gosier, "Personality and Reading Comprehension of Pupils With Higher and Lower Levels of Intelligence," 1958, p. 113.

> That children whose chronological age or its corresponding school grade is not an adequate standard against which to appraise achievement because children have inherited different capacities to learn, mature at different rates, grow up in homes that provide different types of experience background, suffer from different illnesses, struggle with different physical handicaps and emotional tensions and are expected to meet a single standard in their school achievement. To assume that children are doing satisfactory work because they have the skills typical of the average child in the grades to which their chronological ages have assigned them, is unsound. It sets for the child a limited ability, a standard that is likely to lead to frustration and defeat, and it asks of the gifted child only a minimum use of his full potentialities.[1]

In this same connection, Harris states:

> Despite all efforts to get children to achieve "at the norm," wide variations in achievement are characteristic at every grade level. This should not surprise any one who is acquainted with the tremendous differences that exist among children in physique, in intelligence, in motivation, in emotional stability, and in social and cultural background. A grade norm, which is the median performance of a large number of children, necessarily has as many children below it as above it, and very few scores exactly at the median. Educators should aim at helping each child to make the most of his opportunities and abilities.[2]

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[1]Margaret G. McKim, Guiding Growth in Reading in the Elementary School (New York: The Macmillan Company: 1955), pp. 233-36.

[2]Albert J. Harris, Effective Teaching Achievement of Reading, (New York: David McKay and Company, 1963), p. 310.

Many studies have been made to determine how the intelligence of individuals affect their learning capacities and achievement. Harris in determining a definition for intelligence states:

> Most psychologists have not agreed on a definition of intelligence but that ability to deal effectively with abstractions, to learn and to respond appropriately in new situations are ideas which occur most frequently.[1]

Durrell made a study to determine the influence of reading ability on intelligence measures and found:

> That when intelligence and reading tests are given, a fairly marked tendency for reading scores to agree with intelligence is usually found. The exact size of the relationship varies with the grade level and tests used. In general, the better the teaching of reading, the closer the relationship. However, there are always some children whose achievement in reading is much below the level one would expect from their intelligence scores.[2]

In the same connection Harris states:

> School group intelligence tests can identify children as possibly on probably retarded, no child should be considered to be definitely retarded except on the recommendation of a psychologist after an individual examination. Teachers often misjudge children to be retarded when the real trouble was a severe emotional difficulty, a sensory defect such as a severe hearing loss, a speech defect, or a severe reading disability. It is important for teachers to understand the limits of their learning abilities so as not to expect the impossible

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[1] Ibid., p. 312.

[2] D. D. Durrell, "The Influence of Reading Ability on Intelligence Measures," Journal of Educational Psychology, Volume 24, 1933. pp. 28-33.

> of them. Excessive pressure for achievement levels far beyond their capacity has made the lives of many retarded children miserable.[1]

Tinker in doing research on intelligence found:

> Intellectual development appears to be an important determinant of reading success. It is the general observation that dullness results in poor reading. Relatively dull children can make some progress in learning to read but progress is slow and the level they eventually reach is not high.[2]

Tinker cited similar studies made by others who found moderate but high correlations of .50 to .65 between mental age and ability to learn to read. These correlations showed a general tendency for children of higher mental age to read better than those of lower mental age, but the size of the correlations also indicated discrepancy cases. These correlations did indicate that mental maturity is related to progress in reading.[3]

Thomas made a study of reading achievement in terms of mental ability to determine the extent of reading failures in a particular elementary school of 2,918 pupils and found the number that fell more than a year below the reading achievement median closely correlated with the number that fell above the reading achievement median.[4]

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[1]Albert J. Harris, Effective Teaching Achievement of Reading, (New York: David McKay and Company, 1963), p. 312.

[2]Miles A. Tinker, Teaching Elementary Reading, (New York: Appleton-Century-Crofts, Inc., 1952), p. 24.

[3]Ibid., p. 24.

[4]George I. Thomas, "A Study of Reading Achievement in Terms of Mental Ability," The Elementary School Journal. (September, 1946), pp. 28-33.

Bliesmer compared the achievement in reading of bright and dull children of the same mental age and found that, whereas, the two groups were comparable in word recognition, the bright children were generally superior in the more complex aspects of reading.[1]

Sister Mary Justa states that from her experiences she has found the majority of educable mentally retarded children, if given efficient and systematic instruction in a pleasant and secure environment, are able to attain a reading grade level commensurate with their mental age.[2] Similarly, Leavell and Sterling made a study to determine the relationship between intelligence and reading and found a "fairly marked tendency" for the more intelligent children to do better in reading than the less intelligent.[3]

Harris found in his study of intelligence and reading that the size of the relationship varies with the grade level and the test given. He contends that there are always some children whose achievement in reading is much below the level one would expect from their intelligence score.[4] Harris further contends:

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[1]Emery P. Bliesmer, "Reading Abilities of Bright and Dull Children of Comparable Mental Ages," Journal of Educational Psychology, Volume 45, pp. 321-31.

[2]Sister Mary Justa, "Meeting the Reading Needs of the Slow Learner," Journal of Educational Research, Volume 137, (October, 1954), p.402.

[3]U. W. Leavell and Helen Sterling, "A Comparison of Basic Factors in Reading Patterns with Intelligence," Peabody Journal of Education. Volume 16, November, 1938, pp. 149-55.

[4]Albert J. Harris, "Reading and Human Development," Sixieth Yearbook of the National Society For the Study of Education. (Chicago, Illinois: University of Chicago Press, 1961), p. 22.

> Most intelligence tests are scored in terms of mental age and intelligence quotient. The M. A. is a measure of the level of mental maturity achieved at a particular time. It increases fairly steadily as the child gets older. The I. Q. is a measure or rate of mental development, with the average rate set at the value of 100, and tends to remain fairly constant as the child gets older.[1]

Platter, Platter, Sherwood and Sherwood conducted a study of 266 pupils in New York City to find the relationship between reading retardation and measurement of intelligence. They report that if intelligence quotients are to be used as measures of learning capacity, scores on verbal intelligence tests are not valid measures for pupils with reading disabilities. They based their hypotheses on the fact that low scores obtained by retarded readers may reflect their reading retardation rather than a basic inability to learn. It may be that for many pupils, reading disability is a function of social or psychological conditions rather than lack of capacity to learn.[2]

Harris in commenting on individual differences in reading states:

> That the closer schools come to helping each child read in accordance with his mental ability, the wider becomes the differences in reading achievement. Effective reading instruction does not produce more uniform achievement but, rather, helps the very bright to achieve at a superior level and aids the slow to progress successfully but slowly.

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[1] Ibid., p. 23.

[2] Emma E. Platter, Stanton D. Platter, Clarence Sherwood and Silvia Sherwood, "Relationship Between Reading Retardation and Measurements of Intelligence," Personnel and Guidance Journal. Volume 38, (September, 1959-60), p. 49.

> Adapting reading instruction to this wide range of normal differences is one of the most difficult and challenging problems. Nearly all teachers recognize the existence of these differences, yet the teacher's main goal is often to try to get all his pupils up to grade level - an impossible and frustrating goal for the genuinely slow, and an unstimulating one for the bright child. Since teachers have such difficulty, considerable improvement can be expected when the teacher receives help from a curriculum consultant, reading consultant, or remedial teacher.[1]

Sister Mary Lauriana made a survey of the reading achievement of each pupil in Grade 4 (724 pupils) in relation to expectancy using the California Short-Form Test of Mental Maturity. She found the program yielded better group reading scores than anticipated of all levels. The median achievement score of 6.1 was one full grade beyond the anticipated.[2]

Holowinsky made a study to compare reading achievement and mental ages of children with dull, normal, and average abilities. He reported statistically significant differences between the means of dull, normal and high average pupils as well as low average and high average pupils.[3]

After reviewing the literature, the writer felt a further need for doing the research. Reasons were summed up from the following

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[1]Harris, p. 33.

[2]Sister Mary Lauriana, "Actual and Expected Reading Achievement in Detroit," Catholic Educational Review, Volume 59, (May, 1961), pp. 305-312.

[3]Irvin Holowinsky, "The Relationship Between Intelligence (80 - 110 I. Q.), and Achievement in Basic Educational Skills," Training School Bulletin, Volume 58, (May, 1961), pp. 14-21.

authorities on the teaching of reading:

Harris felt that a generation ago, if a child had great trouble in learning to read, it was taken for granted that he was stupid. Now, there is the realization that many children of normal or even well above average intelligence can have special difficulty in learning to read. To him, it is important to distinguish these children from those whose reading is poor because of generally slow mental development.[1]

Spache contended that since more tests are being given, there is the realization that intellectually handicapped children are not disabled readers when they read about as well as their intelligence permits. He felt also, that diagnosis of the significance of personality adjustment will stress the intensive longitudinal study of individuals within a group and point out the relationships among personality development and reading growth.[2]

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[1]Albert J. Harris, Effective Teaching of Reading. (New York: David McKay Company, Inc., 1962), p. 128.

[2]George D. Spache, Toward Better Reading. (Champaign, Illinois: Garrard Publishing Company, 1962), p. 120.

CHAPTER II

ANALYSES AND INTERPRETATION OF DATA

Introduction.-- This chapter analyses and interprets data pertinent to the main purposes of this investigation into the relationship between reading achievement and factors of intelligence and personality adjustment of fifty fourth grade pupils, twenty-five high achievers and twenty-five low achievers, involved in this study. Its first section presents findings which provided general descriptions of the groups in terms of reading achievement, as measured by the Stanford Achievement Reading Test; intelligence, as measured by the Kuhlmann-Anderson Intelligence Test; and personality, as measured by the California Test of Personality. These descriptions were based on the following statistical measures: the median, the mean, standard deviation, and standard error of the mean.

The second section of the chapter reports data which were utilized in determining the estimated expectancy levels of the two groups of high and low achievers as was found by the Bond and Tinker formula (years in school times I. Q. plus 1.0).

The final section of the chapter reports data which were utilized in determining relationships between reading achievement and factors of intelligence and personality adjustment. The main statistic upon which these findings were based was the Pearson's Product Moment Coefficient of Correlation. In each instance, the reliability of this

value was checked on the basis of the position of its "r" in relation to the .05 level of confidence.

General Procedures in the Selection of the High and Low Achievers.-- The average reading performances on the Stanford Achievement Reading Test, Form K yielded measures for the entire fourth grade class enrolled in the Edwin Posey Johnson School from which pupils used in this study were selected.

Table 1 shows the class intervals and frequency distribution of scores made on the test by the fourth grade class. On the basis of these scores which show a mean score of 3.25 and a median of 3.2, the twenty-five high achievers and the twenty-five low achievers were selected. The range was from 1.3 - 6.9. The pupils whose scores fell lowest on the test were chosen the low achievers. The pupils whose scores fell highest on the test were chosen the high achievers.

There were one hundred and two pupils enrolled in the fourth grade class during the year, but due to the mobility of the group only ninety pupils completed the three tests in this study.

Reading Status of Fourth Grade High and Low Achievers.-- The pupils performances on the Stanford Achievement Reading Tests yielded measures of paragraph comprehension, word meaning and average reading. This section carries general descriptions of these results for both groups of pupils.

Paragraph Meaning.-- Table 2 presents data based on the performance of the high achievers on the paragraph meaning section of the test. Their scores ranged from a low of 3.8 to a high of 6.6, with a mean score of 4.68, a median score of 4.51, a standard deviation of

TABLE 1

A FREQUENCY DISTRIBUTION OF SCORES MADE BY NINETY FOURTH GRADE PUPILS ON THE STANFORD ACHIEVEMENT READING TEST, FORM K

Class Intervals	Frequency
6.5 - 6.9	2
6.0 - 6.4	2
5.5 - 5.9	2
5.0 - 5.4	3
4.5 - 4.9	5
4.0 - 4.4	15
3.5 - 3.9	7
3.0 - 3.4	19
2.5 - 2.9	9
2.0 - 2.4	14
1.5 - 1.9	10
1.0 - 1.4	2
Total	90
Mean - 3.25	
Median- 3.2	

.84, and a standard error of the mean of .17. Further inspection of the distribution showed that four or 16 percent fell within the class mean interval. Nine or 36 percent fell above the mean class interval,

and twelve or 48 percent fell below it. These data indicated what seemed to be a fairly lower end of the scale. It was concluded, therefore, that the mean grade equivalent of 4.7 represented a general reading level around which at least two-thirds of these upper level readers tended to cluster.

TABLE 2

A FREQUENCY DISTRIBUTION AND PERCENTAGES OF SCORES MADE BY TWENTY-FIVE SELECTED HIGH ACHIEVERS ON PARAGRAPH MEANING OF THE STANFORD ACHIEVEMENT READING TEST, FORM K

Class Intervals	Frequency	Percent
6.5 - 6.9	1	4
6.0 - 6.4	1	4
5.5 - 5.9	4	16
5.0 - 5.4	3	12
4.5 - 4.9	4	16
4.0 - 4.4	7	28
3.5 - 3.9	5	20
Total	25	100

Median - 4.51

Mean - 4.68

S. D. - .84

S. E. - .17

Table 3 carries comparable data regarding the group of low achievers. On the paragraph meaning section their scores ranged from a low of 1.3 to a high of 2.5, with a mean score of 1.82, a median score of 1.92, a standard deviation of .34, and a standard error of the mean of .07. Further inspection of the distribution

TABLE 3

A FREQUENCY DISTRIBUTION AND PERCENTAGES OF SCORES MADE BY TWENTY-FIVE LOW ACHIEVERS ON PARAGRAPH MEANING OF THE STANFORD ACHIEVEMENT READING TEST, FORM K

Class Intervals	Frequency	Percent
2.5 - 2.9	1	4
2.0 - 2.4	10	40
1.5 - 1.9	11	44
1.0 - 1.4	3	12
Total	25	100

Median - 1.93

Mean - 1.82

S. D. - .34

S. E. - .07

showed eleven or 44 percent fell within the mean class interval. Three or 12 percent fell below the mean class interval. It was concluded, therefore, that 100 percent of the lower-level readers fell below grade placement of 4.7.

Word Meaning.-- Table 4 presents data based on the performance of the high achievers on the paragraph meaning section of the test. Their scores ranged from a low of 3.6 to a high of 7.7 with a mean score of 5.12, a median score of 5.20, a standard deviation of .43,

TABLE 4

A FREQUENCY DISTRIBUTION AND PERCENTAGES OF SCORES MADE BY TWENTY-FIVE SELECTED HIGH ACHIEVERS ON WORD MEANING OF THE STANFORD ACHIEVEMENT READING TEST, FORM K

Class Intervals	Frequency	Percent
7.5 - 7.9	1	4
7.0 - 7.4	1	4
6.5 - 6.9	0	0
6.0 - 6.4	3	12
5.5 - 5.9	2	8
5.0 - 5.4	3	12
4.5 - 4.9	5	20
4.0 - 4.4	8	32
3.5 - 3.9	2	8
Total	25	100

Median - 5.20

Mean - 5.12

S. D. - .43

S. E. - .09

and a standard error of the mean of .09. Further inspection of the distribution showed that three or 12 percent fell within the class mean interval, seven or 28 percent fell above the mean class interval and fiften or 60 percent fell below it. Five or 20 percent fell at grade level. Ten or 40 percent fell above grade level and ten or 40 percent fell below grade level. It was concluded, therefore, from the mean score that more than half of the higher achievers were above grade placement or 4.7.

Table 5 indicates results based on the performance of the low achievers on the paragraph meaning section of the test. The low achievers indicated scores which ranged from a low of 1.3 to a high of 2.7 with a mean score of 1.91, a median of 2.04 and a standard deviation of .31. The standard error of the mean was .06. It was concluded that since the grade placement score was 4.7, 100 percent of the low achievers fell below grade level.

Average Reading.-- Table 6 carries descriptions of how the high achievers rated on reading averages. The high achievers indicated scores which ranged from a low of 4.0 to a high of 6.9 with a mean score of 4.84, a median of 4.60 and a standard deviation of .89. The standard error of the mean was .18. Five or 20 percent of the group fell within the mean class interval, nine or 36 percent of the group fell above the mean class interval and eleven or 44 percent of the group fell below the mean class interval. Five or 20 percent fell at grade level. Nine or 36 percent fell above grade level and eleven or 44 percent fell below grade level. Since grade placement was 4.7, it was concluded that more than half of the group fell at

or above grade level.

TABLE 5

A FREQUENCY DISTRIBUTION AND PERCENTAGES OF SCORES MADE BY TWENTY-FIVE SELECTED LOW ACHIEVERS ON WORD MEANING OF THE STANFORD ACHIEVEMENT READING TEST, FORM K

Class Intervals	Frequency	Percent
2.5 - 2.9	1	4
2.0 - 2.4	14	56
1.5 - 1.9	8	32
1.0 - 1.4	2	8
Total	25	100

Median - 2.04

Mean - 1.91

S. D. - .31

S. E. - .06

Table 7 reports the performances of the low achievers on the reading average section of the test. The low achievers scores ranged from a low of 1.3 to a high of 2.4 with a mean score of 1.88, a median of 1.9 and a standard deviation of .29. The standard error of the mean was .06. Ten or 40 percent fell within the mean class interval. Thirteen or 52 percent fell above the mean class interval and two or 8 percent fell below the mean class interval. Therefore, 100 percent or all of the low achievers scored below grade level.

The grade placement was 4.7.

TABLE 6

A FREQUENCY DISTRIBUTION AND PERCENTAGES OF SCORES MADE BY TWENTY-FIVE HIGH ACHIEVERS ON AVERAGE READING OF THE STANFORD ACHIEVEMENT READING TEST, FORM K

Class Intervals	Frequency	Percent
6.5 - 6.9	2	8
6.0 - 6.4	2	8
5.5 - 5.9	2	8
5.0 - 5.4	3	12
4.5 - 4.9	5	20
4.0 - 4.4	11	44
Total	25	100

Median - 4.60

Mean - 4.84

S. D. - .89

S. E. - .18

Personality Adjustment Levels of the Fourth Grade High and Low Achievers.-- The pupils' performances on the reading sections of the California Test of Personality yielded measures of personal adjustment and social adjustment. This section carries general descriptions of these results for both groups of pupils.

TABLE 7

A FREQUENCY DISTRIBUTION AND PERCENTAGES OF SCORES MADE BY TWENTY-FIVE LOW ACHIEVERS ON AVERAGE READING OF THE STANFORD ACHIEVEMENT READING TEST, FORM K

Class Intervals	Frequency	Percent
2.0 - 2.4	13	52
1.5 - 1.9	10	40
1.0 - 1.4	2	8
Total	25	100

Median - 1.97

Mean - 1.88

S. D. - .29

S. E. - .06

Personal Adjustment.-- Table 8 presents data based on the performances of the high achievers on the personal adjustment section of the test. The scores ranged from a low of 32 to a high of 65 with a mean score of 47.76, a median of 49.0 and a standard deviation of 8.9. The standard error of the mean was 1.82. Five or 20 percent of the pupils scored within the mean class interval. Eight or 32 percent of the pupils scored below the mean class interval and twelve or 48 percent of the pupils scored above the mean class interval. According to the norms of the test, a mean score of 47.76 is

equivalent to a percentile rank of 40. It was concluded, therefore, that the average performance of the pupils who are considered the high reading achievers indicated inadequate personality adjustment. Five fell at grade level; nine, above grade level; and eleven, below

TABLE 8

A FREQUENCY DISTRIBUTION AND PERCENTAGES OF SCORES MADE BY TWENTY-FIVE HIGH ACHIEVERS ON PERSONAL ADJUSTMENT OF THE CALIFORNIA TEST OF PERSONALITY

Class Intervals	Frequency	Percent
65 - 69	1	4
60 - 64	2	8
55 - 59	1	4
50 - 54	8	32
45 - 49	5	20
40 - 44	2	8
35 - 39	3	12
30 - 34	3	12
Total	25	100

Median - 49.0

Mean - 47.76

S. D. - 8.9

S. E. - 1.82

grade level. It was concluded that more than half of the group fell at or above grade level.

Table 9 presents data based on the performances of the low achievers on the personal adjustment section of the test. The scores ranged from a low of 22 to a high of 47 with a mean score of 38.04, a median score of 40.25 and a standard deviation of 6.4. The standard error of the mean was 1.3. Six or 24 percent of the pupils fell within the mean class interval.

TABLE 9

A FREQUENCY DISTRIBUTION AND PERCENTAGES OF SCORES MADE BY TWENTY-FIVE LOW ACHIEVERS ON PERSONAL ADJUSTMENT OF THE CALIFORNIA TEST OF PERSONALITY

Class Intervals	Frequency	Percent
45 - 49	4	16
40 - 44	10	40
35 - 39	6	24
30 - 34	1	4
25 - 29	2	8
20 - 24	2	8
Total	25	100

Median - 40.25

Mean - 38.04

S. D. - 6.4

S. E. - 1.3

Social Adjustment.-- Table 10 presents data based on the performances of the high achievers on the social adjustment section of the test. The scores ranged from a low of 49 to a high of 70 with

a mean score of 57.56, a median of 55.12, and a standard deviation of 7.07. The standard error of the mean was 1.44. Four or 16 percent of the pupils fell within the mean class interval. Nine or 36 percent of the pupils fell above the mean class interval. Twelve or 48 percent of the pupils fell below the mean class interval. According to the norms of the test, a mean score of 57.56 is equivalent to a percentile rank of 40. It was concluded, therefore, that the average

TABLE 10

A FREQUENCY DISTRIBUTION AND PERCENTAGES OF SCORES MADE BY TWENTY-FIVE HIGH SCHIEVERS ON SOCIAL ADJUSTMENT ON THE CALIFORNIA TEST OF PERSONALITY

Class Intervals	Frequency	Percent
70 - 74	3	12
65 - 69	2	8
60 - 64	4	16
55 - 59	4	16
50 - 54	11	44
45 - 49	1	4
Total	25	100

Median - 55.12

Mean - 57.56

S. D. - 7.07

S. E. - 1.44

performance of the high achievers indicated inadequate social adjustment.

Table 11 presents data based on the performances of the low achievers on the social adjustment section of the test. The scores ranged from a high of 53 to a low of 22 with a mean score of 45.56, a median of 49.7 and a standard deviation of 8.94. The standard error of the mean was 1.82. Two or 8 percent of the pupils fell within the mean class interval. Thirteen or 52 percent of the pupils fell above the mean class interval and ten or 40 percent of the pupils fell below the mean class interval. According to the norm set for the test, the mean score of 45.56 is equivalent to percentile rank of 20. It was concluded, therefore, that the average performance of the low achievers indicated inadequate social adjustment.

Total Adjustment.-- Table 12 presents data based on the performances of the high achievers on the total adjustment section of the test. The scores ranged from a low of 82 to a high of 129 with a mean score of 105.6, a median score of 103.87 and a standard deviation of 14.85. The standard error of the mean was 3.03. Four or 16 percent of the pupils scored within the mean class interval. Eight or 32 percent of the pupils scored above the mean class interval and thirteen or 52 percent of the pupils scored below the mean class interval. According to the norms set for the test, the mean score of 105.6 is equivalent to a percentile rank of 40. It was concluded, therefore, that the average total adjustment of the high achievers indicated inadequate total adjustment.

TABLE 11

A FREQUENCY DISTRIBUTION AND PERCENTAGES OF SCORES MADE BY TWENTY-FIVE LOW ACHIEVERS ON SOCIAL ADJUSTMENT ON THE CALIFORNIA TEST OF PERSONALITY

Class Intervals	Frequency	Percent
55 - 59	1	4
50 - 54	12	48
45 - 49	2	8
40 - 44	6	24
35 - 39	2	8
30 - 34	0	0
25 - 29	0	0
20 - 24	2	8
Total	25	100

Median - 49.7

Mean - 45.56

S. D. - 8.94

S. E. - 1.82

Table 13 presents data based on the performances of the low achievers on the total adjustment section of the test. The scores ranged from a low of 44 to a high of 96 with a mean score of 83.60, a median of 88.25 and a standard deviation of 13.23. The standard error of the mean was 2.70. Two or 8 percent of the pupils scored within the mean class interval. Seventeen or 68 percent of the

TABLE 12

A FREQUENCY DISTRIBUTION AND PERCENTAGES OF SCORES MADE BY TWENTY-FIVE HIGH ACHIEVERS ON TOTAL ADJUSTMENT ON THE CALIFORNIA TEST OF PERSONALITY

Class Intervals	Frequency	Percent
130 - 134	1	4
125 - 129	2	8
120 - 124	3	12
115 - 119	2	8
110 - 114	0	0
105 - 109	4	16
100 - 104	4	16
95 - 99	3	12
90 - 94	3	12
85 - 89	1	4
80 - 84	2	8
Total	25	100

Median - 103.87

Mean - 105.6

S. D. - 14.85

S. E. - 3.03

pupils scored above the mean class interval. Six or 24 percent of the pupils fell below the mean class interval. According to the norms set for the test, the mean score of 83.60 is equivalent to a

percentile rank of 20. It was concluded, therefore, that the average total adjustment of the low achievers indicated inadequate total adjustment.

TABLE 13

A FREQUENCY DISTRIBUTION AND PERCENTAGES OF SCORES MADE BY TWENTY-FIVE LOW ACHIEVERS ON TOTAL ADJUSTMENT ON THE CALIFORNIA TEST OF PERSONALITY

Class Intervals	Frequency	Percent
95 - 99	3	12
90 - 94	8	32
85 - 89	6	24
80 - 84	2	8
75 - 79	1	4
70 - 74	2	8
65 - 69	1	4
60 - 64	0	0
55 - 59	0	0
50 - 54	1	4
45 - 49	0	0
40 - 44	1	4
Total	25	100

Median - 88.25

Mean - 83.60

S. D. - 13.23

S. E. - 2.70

Intelligence Levels of the Fourth Grade High and Low Achievers.-- From the Kuhlmann-Anderson Intelligence results, it was noted that there were wide variations in the average ratings of the two groups.

Table 14 summarizes the performances of the high achievers. The scores ranged from a low of 92 to a high of 125 with a mean of 109.2, a median of 109.1, a standard deviation of 5.84. Six or 24 percent of the pupils scored within the mean class interval. Seven or 28

TABLE 14

A FREQUENCY DISTRIBUTION AND PERCENTAGES OF SCORES MADE BY TWENTY-FIVE HIGH ACHIEVERS ON THE KUHLMANN-ANDERSON INTELLIGENCE TEST

Class Intervals	Frequency	Percent
125 - 129	2	8
120 - 124	4	16
115 - 119	1	4
110 - 114	5	20
105 - 109	6	24
100 - 104	3	12
95 - 99	2	8
90 - 94	2	8
Total	25	100
Median - 109.1		
Mean - 109.2		
S. D. - 5.84	S. E. - 1.19	

percent of the pupils scored below the mean class interval. Twelve or 48 percent of the pupils fell above the mean class interval.

Similarly, Table 15 presents intelligence test data of the low achievers. The scores ranged from a low of 71 to a high of 93 with a mean score of 82.08, a median score of 82.08, and a standard deviation of 6.75. Four or 16 percent of the pupils' scores fell within the mean class interval; twelve or 48 percent of the pupils' scores fell above the mean class interval; nine or 36 percent of the pupils' scores fell below the mean class interval.

TABLE 15

A FREQUENCY DISTRIBUTION AND PERCENTAGES OF SCORES MADE BY TWENTY-FIVE LOW ACHIEVERS ON THE KUHLMANN-ANDERSON INTELLIGENCE TEST

Class Intervals	Frequency	Percent
90 - 94	3	12
85 - 89	9	36
80 - 84	4	16
75 - 79	4	16
70 - 74	5	20
Total	25	100

Median - 83.87

Mean - 82.08

S. D. - 6.75

S. E. - 1.38

Reading Expectancy Levels Based on Intelligence Test Results.-- This section carries the description of the expectancy levels from the Bond and Tinker formula for both groups of high and low achievers.

Expectancy Levels of High Achievers.-- Results from computing the formula for high achievers revealed a mean score of 5.0 for the high achievers. Thirteen or 52 percent were expected to fall within the mean class interval, two or eight percent were expected to fall above it and ten or 40 percent were expected to fall below it.

Expectancy Levels for Low Achievers.-- Results from computing the formula showed a mean expected score of 4.2 for the low achievers. Sixteen or 64 percent of the pupils scores were expected to fall within the mean expected class interval, nine or 36 percent were expected to fall below it.

Estimated Reading Expectancy Levels of the Fourth Grade High and Low Achievers.-- The estimated reading expectancy levels were found by using the Bond and Tinker Formula (years in school times intelligence quotient plus 1.0).

Table 16 shows the estimated expectancy levels of the high achievers found by using the formula and the reading averages, which indicate reading achievement levels of the group as found from the Stanford Achievement Reading Test, Form K. This table revealed that the high achievers should obtain a mean expectancy level of 5.0. Thirteen or 52 percent of the scores were expected to fall within the mean interval. Two or 8 percent of the scores were expected to fall above the mean class interval and ten or 40 percent of the scores were expected to fall below the mean class interval. Table 16 further revealed that

four or 16 percent of the pupils scored above expectancy level; eleven or 44 percent of the pupils scored at expectancy level and ten or 40 percent of the group scored below expectancy. In examining the two mean scores, it was found that the high achievers were slightly below expectancy level, since their reading achievement mean score was just 4.84 which is slightly lower than their expectancy mean score of 5.0.

TABLE 16

DISTRIBUTION AND PERCENTAGES OF ESTIMATED EXPECTANCY LEVELS AND READING ACHIEVEMENT AVERAGES OF THE FOURTH GRADE HIGH ACHIEVERS

Expectancy Levels			Reading Achievement Averages		
Class Intervals	Frequency	Percent	Class Intervals	Frequency	Percent
			6.5 - 6.9	2	8
			6.0 - 6.4	2	8
5.5 - 5.9	2	8	5.5 - 5.9	2	8
5.0 - 5.4	13	52	5.0 - 5.4	3	12
4.5 - 4.9	9	36	4.5 - 4.9	5	20
4.0 - 4.4	1	4	4.0 - 4.4	11	44
Mean - 5.0			Mean - 4.84		

Table 17 shows the estimated expectancy levels obtained from the Bond and Tinker formula (years in school times intelligence quotient plus 1.0) and the reading achievement averages from the Stanford Achievement Reading Test, Form K, for the low achievers in the fourth grade class. The scores show a mean expectancy of

4.02, and a reading achievement mean of 1.88. Sixteen or 64 percent of the scores were expected to fall within the mean class interval. Nine or 36 percent of the scores were expected to fall below the mean class interval or between the class interval of 3.5 - 3.9. Table 17 further reveals that none of the scores fell as high as the mean expectancy interval and that none of the scores, fell within the interval, 3.5 - 3.9, which is just below the mean class interval. This table shows that 100 percent of the low achievers fell below expectancy levels by at least two years. The following section shed light on these

TABLE 17

DISTRIBUTION AND PERCENTAGES OF ESTIMATED EXPECTANCY LEVELS AND READING ACHIEVEMENT LEVELS OF THE FOURTH GRADE LOW ACHIEVERS

Expectancy Levels			Reading Achievement Averages		
Class Intervals	Frequency	Percent	Class Intervals	Frequency	Percent
4.0 - 4.4	16	64	4.0 - 4.4	0	0
3.5 - 3.9	9	36	3.5 - 3.9	0	0
3.0 - 3.4	0	0	3.0 - 3.4	0	0
2.5 - 2.9	0	0	2.5 - 2.9	0	0
2.0 - 2.4	0	0	2.0 - 2.4	13	52
1.5 - 1.9	0	0	1.5 - 1.9	10	40
1.0 - 1.4	0	0	1.0 - 1.4	2	8
Mean - 4.02			Mean - 1.88		

discrepancies between reading achievement and intelligence.

Relationships Between Reading Achievement and Intelligence and Personality Adjustment of the Two Groups.-- Table 18 presents the results of correlations of scores made by the twenty-five high and low achievers in total reading averages and total personality adjustment and intelligence.

TABLE 18

COEFFICIENTS OF CORRELATIONS BETWEEN THE SCORES MADE BY THE TWENTY-FIVE HIGH ACHIEVERS AND THE TWENTY-FIVE LOW ACHIEVERS IN TOTAL READING AVERAGES AND TOTAL PERSONALITY ADJUSTMENT AND INTELLIGENCE QUOTIENTS ON THE STANFORD ACHIEVEMENT READING TEST, FORM K, THE CALIFORNIA TEST OF PERSONALITY, FORM AA, AND THE KUHLMANN-ANDERSON INTELLIGENCE TEST, FORM D

Variables		Low Achievers "r"	High Achievers "r"
Personality Adjustment	Reading Achievement	.19	*.49
Intelligence	Reading Achievement	*.46	*.78

*Significant at the 5 percent level of confidence

In order to establish the reliability of these data the Pearson's Product Moment Coefficient of "r" was computed. "R" had to be .38 at 24 degrees of freedom to be significant at the 5 percent level of confidence.

The correlations of Reading and Personality showed "r's" of .19 for the low achievers and .49 for the high achievers, respectively. Further interpretation of these "r's" indicated that for the low achievers there was no significant relationship between reading achievement and personality at the .05 level of confidence. For the high achievers the correlations between reading achievement and personality indicated a positive coefficient which was accepted as indicative of substantial relationship and significant at the .05 level of confidence.

The correlations between reading achievement and intelligence among the low achievers showed an "r" of .46 which revealed a moderate relationship. For the high achievers the coefficient of correlation between reading and intelligence was .78. This showed relatively high positive relationship between reading and intelligence among the high achievers.

Interpretation of the Results of the Correlations.-- This section carries the general interpretation of the results of the co-relation between personality and reading achievement among the high and low achievers and intelligence and reading achievement.

Personality and Reading Achievement.-- The relationship between personality and reading achievement among the high achievers showed an obtained "r" of .49. This indicated a moderate relationship between personality and reading achievement among the high achievers.

The relationship between personality and reading achievement showed an obtained "r" of .19. This indicated no relationship bereading achievement and personality among the low achievers. The

findings support the prevailing idea that personality difficulty may be the result of reading disability.

Intelligence and Reading Achievement.-- The relationship between intelligence and reading achievement among the high achievers revealed an "r" of .78. This showed a relatively high relationship between reading achievement and intelligence among high achievers.

The relationship between reading achievement and intelligence among low achievers showed an "r" of .46. This revealed a moderate relationship between reading achievement and intelligence among the low achievers.

These respective relationships supported the findings which were reported regarding levels of expectancy for the two groups. High achievers tended to more nearly approximate their levels of expectancy in reading, whereas, low achievers were not as regular.

CHAPTER III

SUMMARY AND CONCLUSIONS

Background Summary and Design of the Study.-- With the introduction of new scientific developments, new words have been created; new ideas have been discovered; and new meanings have been formulated, There is a need to implement new methods in initial teaching procedures which will provide significant motivation for today's youth as they begin to receive a meaningful approach to the whole process of learning to read. This will enable them to gain first hand knowledge of the scientific world in which we live, understand the problems that will have to be confronted, formulate judgements and make evaluations.

In the event a child is not able to achieve in reading according to the average, an instructional problem has been created which will necessitate the study of existing individual differences, in order to help him develop according to his own potentialities and expectancy.

During the second semester of the school year 1961 - 62, the writer was enrolled in a class in Reading Difficulties at Atlanta University, Atlanta, Georgia. It was in this class that she increased her awareness of the causes of the many reading disabilities and the factors which contributed to these causes. The writer felt that since reading

has been an experimental, and a well-discussed problem in her particular school where pupils indicate low achievement on standardized tests. There was a need for determining some of these causes which might be contributing factors toward the solution of the particular school problem.

With a knowledge of the factors which will bring desired results in reading achievement and those which will retard achievement therein, the writer was led to want to study some pupils who were achieving, in order to determine whether they were at their fullest potential and whether some who were not achieving were victims of certain factors that were aiding in their retardation.

The writer was interested in doing this study with children at the intermediate level because difficulties are brought to focus more at this level than at any other. It was further felt that if these difficulties were studied and causes were determined, correction at this level will alleviate frustration as pupils reach higher grades.

Since reading has been an outstanding subject for discussion at the Edwin Posey Johnson Elementary School, it was felt that this research study would be of special value to the elementary school personnel, as well as to the administrative heads in determining whether pupils studied in this particular fourth grade class are achieving in reading according to their mental capacities and abilities, in spite of, or, because of their personal and social adjustment.

Further, it was felt that this study will make more teachers aware of these factors, thereby, giving them an incentive to want to study each pupil in their particular classes to help them plan to reach each child and help in the development of his potential growth.

The problem involved in this research was to determine the relationships, if any, in intelligence, personality adjustment, and reading achievement of a select group of high and low achievers in the fourth grade at the Edwin Posey Johnson Elementary School, Atlanta, Georgia.

This study was limited to the factors involved in determining the relationship between the intelligence, personality adjustment, and reading achievement in the select group of pupils in the fourth grade of Edwin Posey Johnson Elementary School, Atlanta, Georgia for the year 1962 - 63. Also, this study was limited in that only one test in each of the areas was used to determine the levels of intelligence, personality adjustment and achievement, wherein, two or more tests for each variable would have made the study more valid.

The purpose of this study was to relate reading achievement to intelligence and personality of select groups of high and low achievers.

More specifically, the purposes of this research were:

1. To determine the reading status of the select group of high and low achievers in the fourth grade at the Edwin Posey Johnson Elementary School, Atlanta, Georgia.

2. To determine the personality adjustment levels of the select group of high and low achievers in the fourth grade class at the Edwin Posey Johnson Elementary School which might relate to reading achievement.

3. To determine the expectancy level of the select group of fourth grade high achievers and low achievers in the Edwin Posey Johnson Elementary School.

4. To determine the relationships of the foregoing factors to reading achievement.

5. To determine to what extent these findings, implications, and recommendations derived from an analysis and interpretation of the data which may be useful in the specific

fourth grade class and in similar situations wherever the findings are pertinent.

For the purpose of this study the following terms carried the meaning ascribed to them.

1. The term "intelligence," the ability to learn and understand, used in this study referred to the level of mental development which was measured by the Kuhlmann-Anderson Intelligence Test.[1]

2. The term "personality adjustment," refers to the "intangible elements of the total complex patterns of feeling, thinking and acting."[2] In this study it referred to those aspects of personal and social adjustment of students as measured by the California Test of Personality.[3]

3. The term "reading achievement," which refers to the reading ability achieved through the use of skills employed used in this study referred to the reading level of accomplishments of students as measured by the Stanford Achievement Test, Reading Form, K.[4]

4. The term "low achievers," used in this study referred to the pupils whose scores were lowest below the median on the Stanford Achievement Test: Reading, Form K.[5]

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[1]F. Kuhlmann and R. G. Anderson, Kuhlmann-Anderson Test, Sixth Edition, (Minneapolis: Educational Test Bureau, 1952).

[2]I. L. Maymon, "The Relationship Among Reading Ability, Vocabulary, Intelligence, and Adjustment of Sixty-two Eighth Grade Pupils," (Unpublished Master's Thesis, Atlanta University, 1962), p. 7.

[3]W. W. Clark, E. W. Tiegs, and Louis R. Thorpe, California Test of Personality, (Monterey, California: California Test Bureau, 1952).

[4]Truman Kelly, R. Madden, E. F. Gardner, Louis M. Terman, Giles M. Ruch, Stanford Achievement Tests, New York: World Book Company, 1952.

[5]Ibid.

5. The term "high achievers," used in this study referred to the pupils whose scores were highest above the median on the Stanford Achievement Test: Reading, Form K.[1]

6. The term "expectancy," used in this study referred to the level of reading achievement expected of the select group of high and low achievers as found from the Bond and Tinker formula for finding expectancy levels.[2]

The significant aspects of the Locale and Research-Design of this study are summarized below.

Locale - This study was conducted at the Edwin Posey Johnson Elementary School, located in the southeastern section of Atlanta, Georgia, the capital city of Georgia. The school has an enrollment of approximately 1100 pupils, a principal, two secretaries, 34 teachers, a cafetorium, 31 classrooms and a library.

Period of Study - The study was conducted during the school term, 1962 - 63. The proposed design was approved May, 1963.

Subjects - The subjects involved in this study were fifty pupils selected from the fourth grades enrolled in the Edwin Posey Johnson Elementary School, Atlanta, Georgia for the second semester of the 1962 - 62 school term.

Instruments - The basic instruments used to collect data for this study were:

The Stanford Achievement Reading Test: Reading Form K
The California Test of Personality; Form AA
The Kuhlmann-Anderson Intelligence Test: Form D
The Bond and Tinker Formula for finding expectancy levels

Criteria of Reliability - The statistical measures used as basic to analyzing the results of these were: mean, median, standard deviation, standard error of the mean and Pearson's Product Coefficient of "r".

Research Procedure - This study was conducted through the following procedural steps:

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[1] Ibid.

[2] Guy L. Bond, Miles A. Tinker, Reading Difficulties (New York: Appleton-Century-Crofts, Inc., 1957), pp. 7-9.

1. A review, summation and presentation of related literature pertinent to this research were made.

2. The approval of the proper school officials to conduct the study and to use previously acquired test data of the Stanford Achievement Test scores and the Kuhlmann-Anderson Intelligence Test scores was secured.

3. The California Test of Personality was administered.

4. The data secured from the test measures were set forth in appropriate tables and figures; and statistically treated through such measures as: the mean, median, standard deviation, standard error of the mean, and the correlation for and "r".

5. The findings, conclusions, implications and recommendations derived from the analysis and interpretation of the data were formulated and incorporated in the finished thesis copy.

The remaining sections of this chapter will be a Summary of the Related Literature, a Summary of the Basic Findings, Conclusions, Implications, and Recommendations.

Summary of the Literature Pertinent to the Study.— In reviewing the studies made on personality and reading achievement, the various researchers seem to indicate the following:

1. That certain factors of personality are related to reading achievement.

2. That there exists from a high proportion to a slight proportion of emotional and personality problems among low achievers in reading. That high achievers also have emotional and personality problems but the extent is not as great.

3. That these proportions of emotional and personality problems may be substantiated by the knowledge of individual differences among all readers.

4. That some of these emotional and personality problems may be caused by frustrations from just being unable to achieve in reading in the classroom situation or from long ranged emotional and personality disturbances.

Studies made on intelligence and reading achievement reveal:

5. That a pupil may be achieving in reading according to his intellectual capabilities. That these capabilities need to be determined.

6. That some pupils may be under-achieving. That is, that they may not be achieving according to their intellectual potentialities. That these potentialities need to be determined.

7. That these capabilities or potentialities may be determined by the use of intelligence tests which may or may not give a true picture. Individual testing would give better results.

8. That pupils can achieve in reading, if "given efficient and systematic instruction in a pleasant and secure environment at a level commensurate with their mental age."

9. That there seems to be a definite relationship between reading achievement and intelligence.

10. That low intelligence results in retarded reading; high intelligence results in better reading achievement.

11. That scores on verbal tests are not valid measures for under-achievers because they reflect retardation rather than inability to read.

12. That reading achievement is an aspect of the total growth of children.

Summary of Basic Findings.-- Major findings of this study follow:

1. The reading averages made by the group of higher achievers indicated a mean score of 4.84, a median of 4.60, a standard deviation of .89, and a standard error of the mean of .18. Five of 20 percent of the group fell within the mean class interval and at grade level. Eleven or 44 percent of the group fell below the mean class interval and below grade level. Nine or 36 percent fell above the mean class interval and above grade level. Grade placement was 4.7.

2. The reading averages made by a group of low achievers indicated a mean score of 1.88, a median of 1.9 and a standard deviation of .29. The standard error of the mean was .06. Ten or 40 percent of the group fell within the mean interval; two or 8 percent fell below the

mean class interval. Thirteen or 52 percent fell above the mean class interval. These scores indicated that 100 percent or all of the low achievers scored below the grade level of 4.7.

3. With regard to expectancy levels of the groups, it was found that of the high achievers, four or 16 percent of the pupils scored above expectancy level; eleven or 44 percent of the pupils scored at their expectancy levels; ten or 40 percent of the pupils scored below expectancy levels. Of the low achievers whose expectancy levels were expected to be from 3.5 to 4.4, it was found that 100 percent of the group fell below expectancy levels, since these scores ranged from 1.3 to 2.4. The grade placement level was 4.7.

4. The performances of the high achievers on the total personality adjustment portion of this test showed a range of 82 to 134 with a median score of 103.87, a mean score of 105.6, and a standard deviation of 14.85. The standard error of the mean was 3.03. According to the norms set for the test, the mean score of 105.6 is equivalent to a percentile of 40. This indicates inadequate total adjustment.

5. The scores of the select group of low achievers on total personality adjustment ranged from a low of 44 to a high of 96 with a mean score of 83.60, a median of 88.25 and a standard deviation of 13.23. The standard error of the mean was 2.70. The mean score of 83.60 is equivalent to a percentile rank of 20. It was concluded that the average total adjustment of the low achievers was inadequate, since the norm of 50 was the percentile rank set for well-adjusted personality adjustment.

6. The I. Q. scores of the select group of high achievers on the Kuhlmann-Anderson Intelligence Test ranged from a low of 92 to a high of 125 with a mean score of 109.2, a median of 109.1 and a standard deviation of 5.84. The standard error of the mean was 1.9.

7. The I. Q. of the low achievers on the Kuhlmann-Anderson Intelligence Test ranged from a low 71 to a high of 93 with a mean score of 82.08, a median score of 82.08, and a standard deviation of 6.75. The standard error of the mean was 1.38.

8. The relationship between personality and reading achievement among the high achievers showed an obtained "r" of 49. This indicated a positive relationship between personality and reading achievement among the high achievers.

9. The relationship between personality and reading achievement among the low achievers yielded an "r" of .19. This indicated no relationship between reading achievement and personality among the low achievers.

10. The relationship between intelligence and reading achievement among the high achievers revealed an "r" of .78. This showed a positive relationship between reading achievement and intelligence among high achievers.

11. The relationship between intelligence and reading achievement among the low achievers showed an "r" of .46. This showed a positive relatiosnhip between reading achievement and intelligence among the low achievers.

Conclusions.-- The following conclusions have been reached and are based primarily on the findings of the study.

1. On the basis of the over-all findings, it was concluded that the high achievers were performing at an average reading achievement level comparable to their grade level.

2. On the basis of over-all findings in reading achievement for the low achievers, it was concluded that they were performing far below grade level.

3. From the moderate relationship between personality and reading achievement among the high achievers, it was concluded that personality and reading achievement were working to their advantage and one or the other might be a positive cause or effect in the total process of effective reading.

4. Similarly, from the quite inadequate personality adjustment for the low achievers, it was concluded that personality difficulties might have been factors resulting in their reading retardation or vice versa.

5. Since there was a positive relationship between intelligence and reading achievement, it was concluded

that the high achievers might have been achieving because of their intelligence levels.

6. From the findings that showed a moderate relationship between reading achievement and intelligence among the low achievers, it was concluded that to a certain degree the low intelligence level retarded the development of the reading process.

7. From the estimated expectancy levels of the high achievers, it may be concluded that on an average the high achievers were just slightly below expectancy level.

8. From estimated expectancy levels for the low achievers, it may be concluded that the low achievers were far below expectancy levels, and thus showed promise of a considerable improvement.

9. From the findings derived from this study, it may be concluded that personality and intelligence may be factors which facilitate reading achievement of pupils or their limited development may be a retarding factor in reading growth.

Implications.-- The following implications have been based on the findings of the study.

1. The average achievements of high achievers would indicate a need for continued effort to help them maintain their level of attainment and to motivate individual pupils who may show promise of operating far above their present grade placement.

2. Because the low achievers indicated very low reading achievement a need for determining factors which would aid in improving their reading achievement was indicated.

3. Because the statistics indicated no relationship between personality and reading achievement among the low achievers, the need for further study to determine the specific factors which would improve their levels of personal and social adjustment was indicated.

4. Because all of the high achievers had not measured up to the percentile rank of 50, the norm set for average personality, would indicate that their personal adjustment needed to be improved.

5. In order to help the low achievers and under-achieving high achievers develop in reading according to their

potentialities or expectations a need for further study as to the factors which are contributing to their retardation was inferred.

6. Among high and low achievers, there appeared to be some justification for enrichment which might release any potential for increased intellectual growth.

Recommendations.-- The following are recommendations based on the findings, conclusions, and implications of the study.

1. That further surveys and descriptive case studies be made of the under-achieving high achievers and the low achievers to determine other factors which may be causing retardation.

2. That there be more activities which would aid in the development of the pupils' personality adjustments.

3. That efforts be made to try to help the pupils achieve their expectancy levels through enriched classroom work and special classes in reading.

4. That more activities be provided which would challenge pupils to take advantage of the high relationship between reading and intelligence through increasingly effective means of making reading a thinking process in content areas as well as in regular reading classes.

5. That a study be made to determine what activities would improve personalities and intelligence levels among low achievers and the under-achieving high achievers, particularly, and in all instances, wherein, the pupils may not be working up to capacity.

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APPENDIX

FORMULAE OR OTHER STATISTICAL MEANS FOR FINDING STATISTICAL DATA

Median:

Middle score above which and below which the cases fall, arranged in descending order.

Mean:

$$M = \frac{\Sigma f X}{N}$$

Standard Deviation:

$$S = \sqrt{\frac{\Sigma x^2}{N-1}}$$

Standard Error of the Mean:

$$S_m = \frac{S}{\sqrt{N-1}}$$

The Product Moment Correlation Coefficient r:

$$r = \frac{\Sigma xy}{\sqrt{\Sigma x^2 \Sigma y^2}}$$

TISTS

Kuhlmann-Anderson Test D

Sixth Edition

NAME _____

GRADE _____ BOY_____ GIRL_____

TEACHER _____

SCHOOL _____ CITY _____

DATE TESTED _____ Year _____ Month _____ Day

DATE OF BIRTH _____ Year _____ Month _____ Day

AGE _____ Years _____ Months _____ Days

Test Results _____ _____ _____

Test administered by _____

Test scored by _____

Comments: _____

_____

PERSONNEL PRESS, INC. PRINCETON, NEW JERSEY

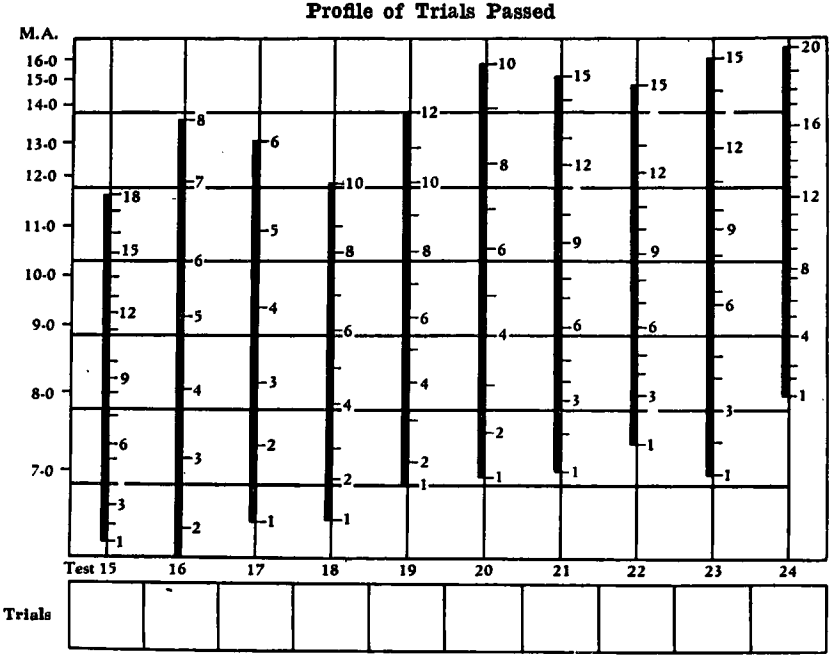
Test D Summary

M.A.

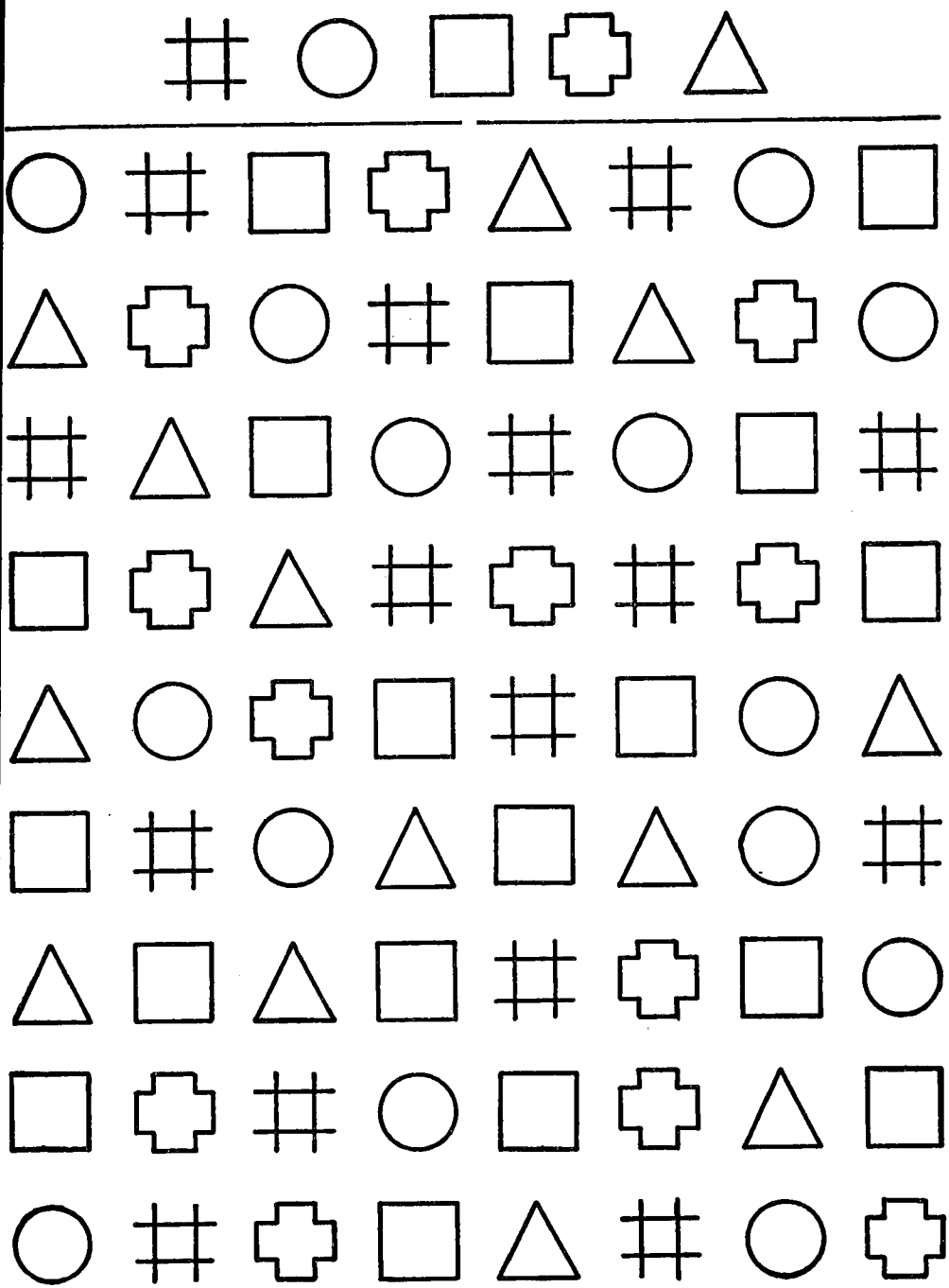
*. . . .	**9-0**	**11-0**	**13-0**
. . . .	9-1	11-1	13-1
	9-2	11-2	13-2
7-0	9-3	11-3	13-3
7-1	9-4	11-4	13-4
7-2	9-5	11-5	13-5
7-3	9-6	11-6	13-6
7-4	9-7	11-7	13-7
7-5	9-8	11-8	13-8
7-6	9-9	11-9	13-9
7-7	9-10	11-10	13-10
7-8	9-11	11-11	13-11
7-9	**10-0**	**12-0**	**14-0**
7-10	10-1	12-1	14-1
7-11	10-2	12-2	14-5
	10-3	12-3	14-9
8-0	10-4	12-4	
8-1	10-5	12-5	15-3
8-2	10-6	12-6	15-5
8-3	10-7	12-7	15-8
8-4	10-8	12-8	
8-5	10-9	12-9	**16-0**
8-6	10-10	12-10	16-5
8-7	10-11	12-11	
8-8			
8-9			
8-10			
8-11			

*In these spaces write zero scores and M.A. scores below those listed. To find the Median M.A. take average of the 5th and 6th highest scores.

Profile of Trials Passed



Median M.A. _____



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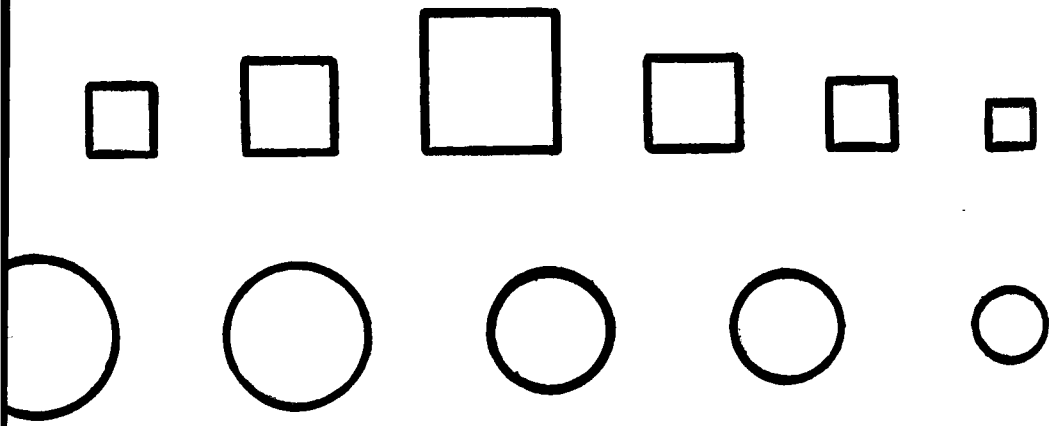

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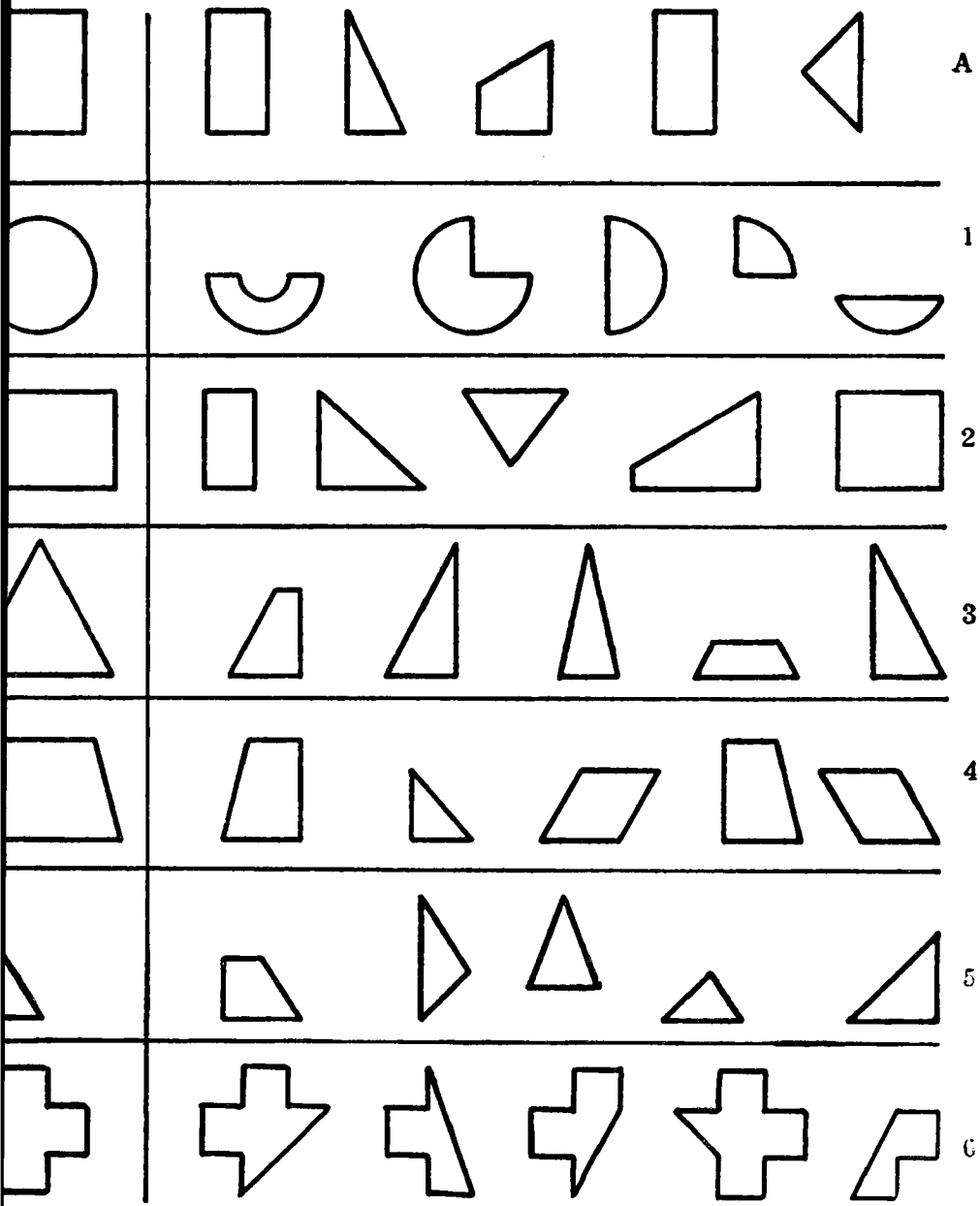

No. 17

EXAMPLES:

Y-B-O .....

E-M-T-I .....

1. N-M-A .....

2. L-A-B-L .....

3. B-Y-A-B .....

4. X-B-O .....

5. O-C-W. .....

6. G-L-R-I .....

7. K-O-B-O .....

8. V-H-A-E .....

9. M-O-S-U-E .....

10. P-N-I-L-C-E .....

1	2	3	4	5	6	7	8	9
A	E	U	B	D	G	C	F	H

EXAMPLES:

(A) 1 6 2 .....

(B) 8 1 7 2 .....

5 3 6 ..... (1)

9 1 5 ..... (2)

5 3 2 ..... (3)

4 1 6 ..... (4)

2 1 7 9 ..... (5)

9 3 6 2 ..... (6)

4 2 1 5 ..... (7)

1 6 3 2 ..... (8)

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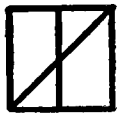
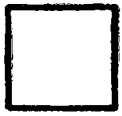
5 2 4 1 3 7 9 ..... (12)





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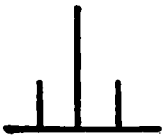

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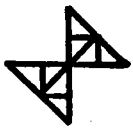

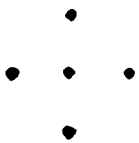

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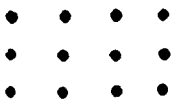

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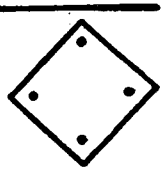

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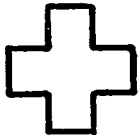

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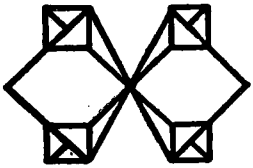

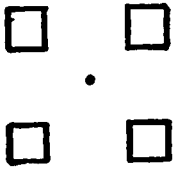

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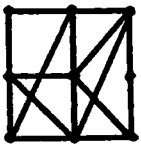

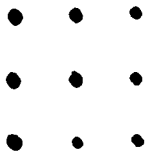

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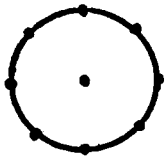


EXAMPLES:

bread meat eggs plate cheese

bush stone tree flower grass

1. top rattle doll sled playing
2. book marbles pencil map slate
3. cup saucer plate spoon bowl
4. skating language arithmetic spelling reading
5. apples peaches nuts pears cherries
6. mother cousin brother aunt friend
7. town house village hamlet city
8. sparrow butterfly bee rabbit eagle
9. you we and I he
10. free happy glad joyous pleased
11. automobile ship motorcycle bicycle airplane
12. general ensign major colonel captain
13. energetic ambitious cautious industrious zealous
14. amazement wonder surprise astonishment anger
15. foolhardy dangerous reckless venturesome rash

XAMPLES:

table	box	furniture	bed	cloth	wood	
apple	cherry	seed	grow	fruit	leaf	

1. silk	red	pretty	dress	fashion	cloth	
2. salmon	meat	water	swim	fish	food	
3. sheep	flock	animal	meat	woolly	butchered	
4. diamond	precious	value	sparkles	jewel	ring	
5. hammer	carpenter	nail	tool	useful	iron	
6. lettuce	vegetable	green	leaves	healthful	garden	
7. man	boy	strong	fights	muscle	person	
8. gun	shoot	muzzle	weapon	dangerous	wound	
9. carpentry	tools	trade	man	wages	house	
0. gold	bright	valuable	mineral	ring	money	
1. wagon	vehicle	brake	wood	ride	carriage	
2. baseball	practice	diamond	healthful	team	sport	
3. bee	wax	birds	honey	insect	stings	
4. mustard	burns	spice	powder	strong	flavor	
5. honesty	excellence	best	virtue	right	desirable	

EXAMPLES:

early slow <u>wrong</u> light big <u>right</u>

free good old heavy bad fast

1. old rich wide poor green full
2. light soon bad sick dark narrow
3. brown open full dark sorry empty
4. laugh now wait whistle study cry
5. soon above when even below back
6. strong fight weak muscle jump work
7. like fun friend cousin enemy skate
8. never where while still quickly always
9. sharp narrow point steep dull study
10. string line straight turn old crooked
11. health cheerful weight gloomy sleepy food
12. polite pupil behavior book rude funny
13. tennis easy punish lesson nice reward
14. add arithmetic wrong subtract fraction number
15. false broken ancient valuable price modern

EXAMPLE:

detrimental

1. deem
2. nine
3. lard
4. limb
5. trip
6. arid

---

demonstrable

1. mean
2. eyes
3. road
4. lace
5. dare
6. reds
7. open
8. arms
9. lets
10. dime
11. odor
12. east
13. beak
14. rant
15. read
16. reef
17. babe
18. luna
19. amen
20. star
21. stir
22. nets
23. rags
24. lamb
25. shot
26. made
27. need
28. stew
29. bred
30. alas
31. lean
32. omen
33. scab
34. slot
35. fear
36. mere
37. done
38. true
39. odes
40. earn
41. mope
42. node
43. rash
44. boar
45. test

Elementary • GRADES 4-5-6-7-8 • form AA

California Test of Personality

1953 Revision

Devised by

LOUIS P. THORPE, WILLIS W. CLARK, AND ERNEST W. TIEGS

Do not write or mark on this booklet unless told to do so by the examiner.

E

(CIRCLE ONE)

Name.....**Grade**.....**Boy Girl**
Last First Middle

School.....**City**.....**Date of Test**.....
Month Day Year

Examiner.....(.....) **Pupil's Age**.....**Date of Birth**.....
Month Day Year

INSTRUCTIONS TO PUPILS:

This booklet contains some questions which can be answered YES or NO. Your answers will show what you usually think, how you usually feel, or what you usually do about things. Work as fast as you can without making mistakes.

DO NOT TURN THIS PAGE UNTIL TOLD TO DO SO.

PUBLISHED BY CALIFORNIA TEST BUREAU, DEL MONTE RESEARCH PARK, MONTEREY, CALIFORNIA
BRANCH OFFICES: NEW CUMBERLAND, PA.; MADISON, WIS.; DALLAS, TEXAS
9 8 7 6 5 4 3 2 1

INSTRUCTIONS TO PUPILS

DO NOT WRITE OR MARK ON THIS TEST BOOKLET UNLESS TOLD TO DO SO BY THE EXAMINE

You are to decide for each question whether the answer is YES or NO and mark it as you are told. The followi are two sample questions:

SAMPLES

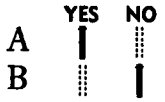
A. Do you have a dog at home? **YES NO**

B. Can you ride a bicycle? **YES NO**

DIRECTIONS FOR MARKING ANSWERS

ON ANSWER SHEETS

Make a heavy black mark under the word YES or NO to show your answer. If you have a dog at home, you would mark under the YES for question A as shown below. If you cannot ride a bicycle, you would mark under the NO for question B as shown below.



Remember, you mark under the word that shows your answer. Now find Samples A and B on your answer sheet and show your answer for each by marking YES or NO. Do it now. Find answer row number 1 on your answer sheet. Now wait until the examiner tells you to begin.

ON TEST BOOKLETS

Draw a circle around the word YES or NO, whichev shows your answer. If you have a dog at home, dra a circle around the word YES in Sample A above; not, draw a circle around the word NO. Do it now.

If you can ride a bicycle, draw a circle around th word YES in Sample B above; if not, draw a circ around the word NO. Do it now.

Now wait until the examiner tells you to begin.

After the examiner tells you to begin, go right on from one page to another until you have finished the test or a told to stop. Work as fast as you can without making mistakes. Now look at item 1 on page 3. Ready, begin.

SECTION 1 A

1. Do you usually keep at your work until it is done? YES NO

2. Do you usually apologize when you are wrong? YES NO

3. Do you help other boys and girls have a good time at parties? YES NO

4. Do you usually believe what other boys or girls tell you? YES NO

5. Is it easy for you to recite or talk in class? YES NO

6. When you have some free time, do you usually ask your parents or teacher what to do? YES NO

7. Do you usually go to bed on time, even when you wish to stay up? YES NO

8. Is it hard to do your work when someone blames you for something? YES NO

9. Can you often get boys and girls to do what you want them to? YES NO

10. Do your parents or teachers usually need to tell you to do your work? YES NO

11. If you are a boy, do you talk to new girls? If you are a girl, do you talk to new boys ? YES NO

12. Would you rather plan your own work than to have someone else plan it for you? YES NO

GO RIGHT ON TO THE NEXT COLUMN

Section 1 A
(number right) .....

SECTION 1 B

13. Do your friends generally think that your ideas are good? YES NO

14. Do people often do nice things for you? YES NO

15. Do you wish that your father (or mother) had a better job? YES NO

16. Are your friends and classmates usually interested in the things you do? YES NO

17. Do your classmates seem to think that you are not a good friend? YES NO

18. Do your friends and classmates often want to help you? YES NO

19. Are you sometimes cheated when you trade things? YES NO

20. Do your classmates and friends usually feel that they know more than you do? YES NO

21. Do your folks seem to think that you are doing well? YES NO

22. Can you do most of the things you try? YES NO

23. Do people often think that you cannot do things very well? YES NO

24. Do most of your friends and classmates think you are bright? YES NO

GO RIGHT ON TO THE NEXT PAGE

Section 1 B
(number right) .....

SECTION 1 C

25. Do you feel that your folks boss you too much? YES NO

26. Are you allowed enough time to play? YES NO

27. May you usually bring your friends home when you want to? YES NO

28. Do others usually decide to which parties you may go? YES NO

29. May you usually do what you want to during your spare time? YES NO

30. Are you prevented from doing most of the things you want to? YES NO

31. Do your folks often stop you from going around with your friends? YES NO

32. Do you have a chance to see many new things? YES NO

33. Are you given some spending money? YES NO

34. Do your folks stop you from taking short walks with your friends? YES NO

35. Are you punished for lots of little things? YES NO

36. Do some people try to rule you so much that you don't like it? YES NO

GO RIGHT ON TO THE NEXT COLUMN

Section 1 C
(number right) .....

SECTION 1 D

37. Do pets and animals make friends with you easily? YES N

38. Are you proud of your school? YES N

39. Do your classmates think you cannot do well in school? YES N

40. Are you as well and strong as most boys and girls? YES N

41. Are your cousins, aunts, uncles, or grandparents as nice as those of most of your friends? YES N

42. Are the members of your family usually good to you? YES N

43. Do you often think that nobody likes you? YES N

44. Do you feel that most of your classmates are glad that you are a member of the class? YES N

45. Do you have just a few friends? YES N

46. Do you often wish you had some other parents? YES N

47. Is it hard to find friends who will keep your secrets? YES N

48. Do the boys and girls usually invite you to their parties? YES N

GO RIGHT ON TO THE NEXT PAGE

Section 1 D
(number right) .....

SECTION 1 E

49. Have people often been so unfair that you gave up? YES NO

50. Would you rather stay away from most parties? YES NO

51. Does it make you shy to have everyone look at you when you enter a room? YES NO

52. Are you often greatly discouraged about many things that are important to you? YES NO

53. Do your friends or your work often make you worry? YES NO

54. Is your work often so hard that you stop trying? YES NO

55. Are people often so unkind or unfair that it makes you feel bad? YES NO

56. Do your friends or classmates often say or do things that hurt your feelings? YES NO

57. Do people often try to cheat you or do mean things to you? YES NO

58. Are you often with people who have so little interest in you that you feel lonesome? YES NO

59. Are your studies or your life so dull that you often think about many other things? YES NO

60. Are people often mean or unfair to you? YES NO

GO RIGHT ON TO THE NEXT COLUMN

Section 1 E
(number right) .....

SECTION 1 F

61. Do you often have dizzy spells? YES NO

62. Do you often have bad dreams? YES NO

63. Do you often bite your fingernails? YES NO

64. Do you seem to have more headaches than most children? YES NO

65. Is it hard for you to keep from being restless much of the time? YES NO

66. Do you often find you are not hungry at meal time? YES NO

67. Do you catch cold easily? YES NO

68. Do you often feel tired before noon? YES NO

69. Do you believe that you have more bad dreams than most of the boys and girls? YES NO

70. Do you often feel sick to your stomach? YES NO

71. Do you often have sneezing spells? YES NO

72. Do your eyes hurt often? YES NO

GO RIGHT ON TO THE NEXT PAGE

Section 1 F
(number right) .....

SECTION 2 A

73. Is it all right to cheat in a game when the umpire is not looking? YES NO

74. Is it all right to disobey teachers if you think they are not fair to you? YES NO

75. Should one return things to people who won't return things they borrow? YES NO

76. Is it all right to take things you need if you have no money? YES NO

77. Is it necessary to thank those who have helped you? YES NO

78. Do children need to obey their fathers or mothers even when their friends tell them not to? YES NO

79. If a person finds something, does he have a right to keep it or sell it? YES NO

80. Do boys and girls need to do what their teachers say is right? YES NO

81. Should boys and girls ask their parents for permission to do things? YES NO

82. Should children be nice to people they don't like? YES NO

83. Is it all right for children to cry or whine when their parents keep them home from a show? YES NO

84. When people get sick or are in trouble, is it usually their own fault? YES NO

GO RIGHT ON TO THE NEXT COLUMN

Section 2 A
(number right) .....

SECTION 2 B

85. Do you let people know you are right no matter what they say? YES NO

86. Do you try games at parties even if you haven't played them before? YES NO

87. Do you help new pupils to talk to other children? YES NO

88. Does it make you feel angry when you lose in games at parties? YES NO

89. Do you usually help other boys and girls have a good time? YES NO

90. Is it hard for you to talk to people as soon as you meet them? YES NO

91. Do you usually act friendly to people you do not like? YES NO

92. Do you often change your plans in order to help people? YES NO

93. Do you usually forget the names of people you meet? YES NO

94. Do the boys and girls seem to think you are nice to them? YES NO

95. Do you usually keep from showing your temper when you are angry? YES NO

96. Do you talk to new children at school? YES NO

GO RIGHT ON TO THE NEXT PAGE

Section 2 B
(number right) .....

SECTION 2 C

97. Do you like to scare or push smaller boys and girls? YES NO

98. Have unfair people often said that you made trouble for them? YES NO

99. Do you often make friends or classmates do things they don't want to? YES NO

100. Is it hard to make people remember how well you can do things? YES NO

101. Do people often act so mean that you have to be nasty to them? YES NO

102. Do you often have to make a "fuss" or "act up" to get what you deserve? YES NO

103. Is anyone at school so mean that you tear, or cut, or break things? YES NO

104. Are people often so unfair that you lose your temper? YES NO

105. Is someone at home so mean that you often have to quarrel? YES NO

106. Do you sometimes need something so much that it is all right to take it? YES NO

107. Do classmates often quarrel with you? YES NO

108. Do people often ask you to do such hard or foolish things that you won't do them? YES NO

GO RIGHT ON TO THE NEXT COLUMN

Section 2 C
(number right) .....

SECTION 2 D

109. Do your folks seem to think that you are just as good as they are? YES NO

110. Do you have a hard time because it seems that your folks hardly ever have enough money? YES NO

111. Are you unhappy because your folks do not care about the things you like? YES NO

112. When your folks make you mind are they usually nice to you about it? YES NO

113. Do your folks often claim that you are not as nice to them as you should be? YES NO

114. Do you like both of your parents about the same? YES NO

115. Do you feel that your folks fuss at you instead of helping you? YES NO

116. Do you sometimes feel like running away from home? YES NO

117. Do you try to keep boys and girls away from your home because it isn't as nice as theirs? YES NO

118. Does it seem to you that your folks at home often treat you mean? YES NO

119. Do you feel that no one at home loves you? YES NO

120. Do you feel that too many people at home try to boss you? YES NO

GO RIGHT ON TO THE NEXT PAGE

Section 2 D
(number right) .....

SECTION 2 E

121. Do you think that the boys and girls at school like you as well as they should? YES NO

122. Do you think that the children would be happier if the teacher were not so strict? YES NO

123. Is it fun to do nice things for some of the other boys or girls? YES NO

124. Is school work so hard that you are afraid you will fail? YES NO

125. Do your schoolmates seem to think that you are nice to them? YES NO

126. Does it seem to you that some of the teachers "have it in for" pupils? YES NO

127. Do many of the children get along with the teacher much better than you do? YES NO

128. Would you like to stay home from school a lot if it were right to do so? YES NO

129. Are most of the boys and girls at school so bad that you try to stay away from them? YES NO

130. Have you found that some of the teachers do not like to be with the boys and girls? YES NO

131. Do many of the other boys or girls claim that they play games more fairly than you do? YES NO

132. Are the boys and girls at school usually nice to you? YES NO

GO RIGHT ON TO THE NEXT COLUMN

Section 2 E
(number right) .....

SECTION 2 F

133. Do you visit many of the interesting places near where you live? YES NO

134. Do you think there are too few interesting places near your home? YES NO

135. Do you sometimes do things to make the place in which you live look nicer? YES NO

136. Do you ever help clean up things near your home? YES NO

137. Do you take good care of your own pets or help with other people's pets? YES NO

138. Do you sometimes help other people? YES NO

139. Do you try to get your friends to obey the laws? YES NO

140. Do you help children keep away from places where they might get sick? YES NO

141. Do you dislike many of the people who live near your home? YES NO

142. Is it all right to do what you please if the police are not around? YES NO

143. Does it make you glad to see the people living near you get along fine? YES NO

144. Would you like to have things look better around your home? YES NO

STOP NOW WAIT FOR FURTHER INSTRUCTIONS

Section 2 F
(number right) .....

Elementary Battery | FORM K

STANFORD ACHIEVEMENT TEST

TRUMAN L. KELLEY • RICHARD MADDEN • ERIC F. GARDNER • LEWIS M. TERMAN • GILES M. RUCH

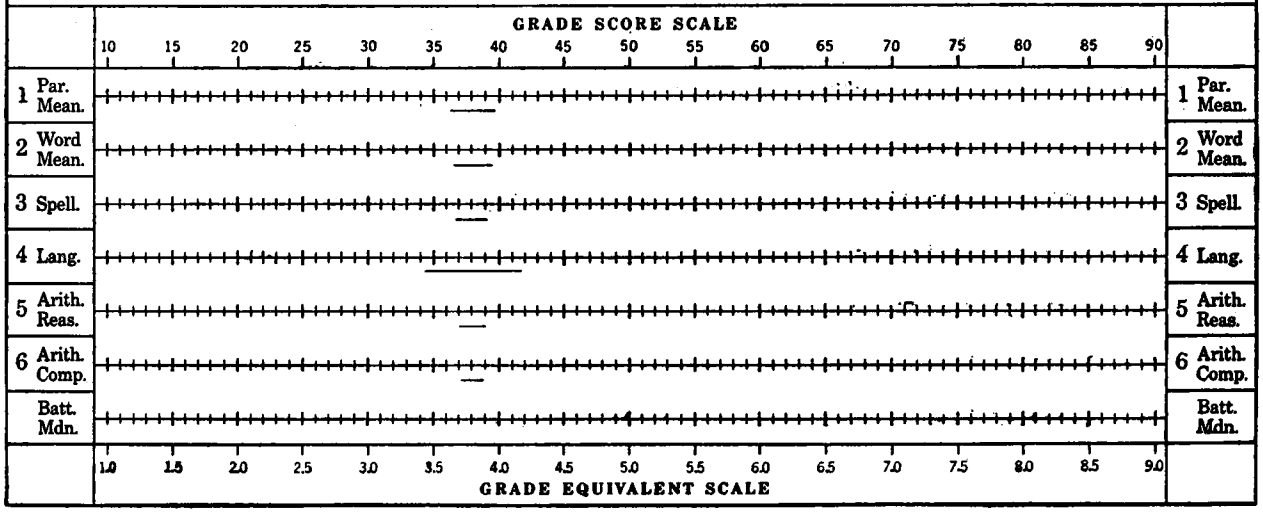
Name_____ Age_____ Grade_____ Boy or girl_____

Teacher_____ School_____ Date of birth_____ *Year* _____ *Month* _____ *Day*

City or town_____ State_____ Date_____

	1 PAR. MEAN.	2 WORD MEAN.	AVER. READ.	3 SPELL.	4 LANG.	5 ARITH. REAS.	6 ARITH. COMP.	AVER. ARITH.	BATTERY MEDIAN
Grade Equiv.									
Age Equiv.									
%-ile Rank									

Individual Profile Chart



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a

TEST 1 *Paragraph Meaning*

DIRECTIONS: Find the word that belongs in each space, and draw a line under it. Do *not* write in the spaces.

SAMPLE:

Wheat grows on farms. Most bread is made from wheat. If farmers did not plant __51__, most people would have no __52__ to eat.

51. **corn** **potatoes** **rice** **wheat**

52. **oranges** **bread** **carrots** **eggs**

A baby will eat, __1__, and cry.

1. **swim** **sleep** **fly** **write**

I have four pet hens.
They give us __2__.

2. **milk** **apples** **eggs** **farms**

The man was funny.
He made us __3__.

3. **laugh** **cry** **go** **come**

A hungry kitten likes to __4__.

4. **play** **mew** **run** **eat**

Rain was falling hard. Jimmy wanted to play in the rain. He ran out and splashed in the puddles. "Jimmy," called his mother, "come in out of the __5__ at once. Your clothes are getting __6__ and you will catch a cold."

5. **street** **yard** **mud** **rain**

6. **wet** **dirty** **heavy** **stiff**

Tom's dog is named Buster.
Tom and Buster ran a race.
The dog ran faster than Tom.
__7__ won the race.

7. **They** **Tom** **Tim** **Buster**

A bus just went past our house filled wi
children in play clothes. They all had pac
ages of apples, sandwiches, cookies, and oth
good things to __8__. They were Miss Aller
class on their way to the park for a __9__.

8. **sell** **buy** **cook** **eat**

9. **ride** **picnic** **trip** **visit**

We saw a lazy grasshopper and a busy a
in the garden. The __10__ was just restin
but the __11__ was digging its home.

10. **grasshopper** **child** **ant** **gardener**

11. **gopher** **squirrel** **ant** **grasshoppe**

The Indians had no matches, but they ha
another way of starting fires. They di
covered that when two pieces of very ha
stone that we call flint are struck togethe
sparks will fly. By means of the sparks fro
flint the __12__ were able to light their __13__

12. **Indians** **men** **people** **pioneers**

13. **matches** **stoves** **fires** **way**

Roy is taller than Dick, but Dick is t
older of the two boys. The shorter boy
__14__. The younger boy is __15__.

14. **young** **fat** **Dick** **Roy**

15. **thin** **Dick** **short** **Roy**

Sue had an apple and an orange. She sai
"Which do you choose?" Jane said, "I wa
the orange." __16__ said, "Then I will kee
this __17__."

16. **She** **Sue** **Jane** **Lou**

17. **one** **orange** **candy** **apple**

John's mother gave him a watch. S
said, "Come home at six o'clock. Do not
late." John came home when his __18__ sa
ten minutes of six. Mother said, "I am gl
you came home __19__."

18. **watch** **friend** **mother** **clock**

19. **at last** **early** **finally** **running**

Go on to the next pag

TEST 1 *Paragraph Meaning* (Continued)

Plants get water through their roots. Each big root branches into smaller and smaller parts until the rootlets at the end are as thin as hairs. These tiny __20__ wrap themselves around bits of earth and take up food and __21__ from them.

20. **twigs** **stems** **rootlets** **plants**
21. **pieces** **water** **material** **things**

The mother mosquito lays eggs in the water, and the eggs hatch into little wigglers that come to the top of the water to breathe the air. One way of getting rid of mosquitoes is to drain the __22__ out of pools and puddles. If you cannot drain these, put some oil on the water. The wigglers will __23__ because they will not be able to get air to __24__.

22. **mosquitoes** **mud** **water** **wigglers**
23. **leave** **swim** **wiggle** **die**
24. **fly** **breathe** **eat** **blow**

At school we play dodge ball. The children form a circle. One child stands in the center and throws a big __25__ toward the others. If a child is hit, he has to stand in the __26__ and __27__ the ball.

25. **ring** **wheel** **tire** **ball**
26. **center** **yard** **corner** **circle**
27. **throw** **bounce** **hit** **push**

If you look at a pencil, you will often see a number printed on it to show how hard the lead is. Number 1 pencils are very soft. Number 2 pencils are a little harder than Number 1 pencils, but are not so hard as Number 3 pencils. Ann's Number 2 pencil is __28__ than Mary's Number 3 pencil, but it is __29__ than Alice's Number 1 pencil.

28. **longer** **shorter** **softer** **harder**
29. **longer** **shorter** **softer** **harder**

Long ago the Indians of the Great Plains killed and ate buffaloes. They made their tepees and clothing out of buffalo skins. Some of their cooking vessels were even made of rawhide from the same animal. The horns and bones provided tools. Thus, the __30__ was in many ways a useful __31__ to these Indians.

30. **buffalo** **deer** **skin** **meat**
31. **material** **product** **thing** **animal**

The sand on our ocean beaches was once rock. Tides and waves pound the rocks, and the tiny __32__ that are broken off are called grains of __33__.

32. **bits** **shells** **plants** **microbes**
33. **corn** **wheat** **sand** **rock**

Next to the air we breathe, water is the most necessary thing for life. Persons can live for several weeks without food. To go without __34__ for more than a few days will cause even the strongest man to die. One can go without __35__ much longer than he can go without water.

34. **air** **food** **sleep** **water**
35. **air** **food** **breathing** **anything**

The first permanent English colony in America was established at Jamestown in Virginia, chiefly for commercial purposes. The second colony was founded in Plymouth, Massachusetts, by the Pilgrims, who had suffered religious persecution at home. Unlike the founders of __36__, who sought financial gain, the __37__ came to America in order to practice their __38__ without interference.

36. **Plymouth** **Jamestown** **New York** **Mexico**
37. **English** **Virginians** **Pilgrims** **French**
38. **business** **religion** **trade** **politics**

Go on to the next page.

TEST 1 *Paragraph Meaning* (Continued)

Once there was a boy who liked to earn money. He lived in a house with a garden in which he raised vegetables. Every day he took some of his __39__ to the market to __40__.

39. **money** **flowers** **carrots** **toys**
40. **spend** **sell** **show** **play**

In olden days men made their own pens from the quills of feathers. It required considerable skill to cut a pen properly so as to suit one's individual taste in writing. Students were always on the lookout for good goose, swan, turkey, or other bird feathers. Goose quills made the most satisfactory __41__ for general __42__, but schoolmasters liked pens made from the __43__ of swan feathers because they fitted best behind the ear.

41. **feathers** **pens** **birds** **points**
42. **use** **wear** **times** **effects**
43. **ends** **stubs** **quills** **parts**

An important part of the work on farms which grow fruit and vegetables is the picking or harvesting. When peas, peaches, beans, or berries are ripe, they must be __44__ at once. The job is often done by __45__ who travel with their families from one field to another, stopping wherever a particular kind of __46__ is __47__.

44. **harvested** **cultivated** **used** **shipped**
45. **tramps** **workers** **salesmen** **students**
46. **fruit** **vegetable** **crop** **thing**
47. **ripe** **found** **growing** **seen**

In general, insects may be divided into two classes. The group that lives on solid foods has biting mouth parts. The group that lives on liquid foods has long, hollow, sucking mouth parts. The butterfly visits flowers, drawing up its food with its long sucking tube in __48__ form. Grasshoppers do untold damage to grain and other farm crops. Because the grasshopper eats __49__ food, its mouth parts are of the __50__ type.

48. **solid** **liquid** **convenient** **dry**
49. **green** **plant** **liquid** **solid**
50. **biting** **sucking** **hollow** **strong**

Stop.

No. RIGHT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
Gr. score	below 10			10	12	14	15	16	17	18	20	21	22	23	24	25	25	26	27	28	28	29	30	30	31	32	33	34	35	36	37	38	39	40	42	43	45	47	49	52	55	58	62	67	73	81	84	90	97	100	

TEST 2 *Word Meaning*

DIRECTIONS: Draw a line under the one word that makes the sentence true, as shown in the first sample. Look at all four words and choose the best one.

SAMPLES:

The name of a color is
farm milk red pet

The day that comes after Friday is
Monday Tuesday Saturday Sunday

1 A kitten will drink
nothing bread milk cookies

2 A chair is to
sit on talk to cut with ride upon

3 We can eat
corn sunshine wind gold

4 An apple is a
pie farm fruit cart

5 If a boy and girl have the same mother and father, they are brother and
baby child aunt sister

6 Tomorrow will come
Monday after today early late

7 Ice is frozen
milk cream jelly water

8 If I drop a glass plate, it will probably
bounce break spill bend

9 New York is a large
boat city factory capital

10 Small means
first early boy little

11 To begin is to
bring carry start find

12 To repair is to
spend fix need miss

13 Children are people who are very
young short fair friendly

14 To be whole is to be
broken religious old all together

15 A chapel is a
picture cross church store

16 Across means
going street over behind

17 If you have a pain just above your foot, it is in your
shoulder chest wrist ankle

18 If you choose between two things, you
decide hurry plan wait

19 Strength means
duty power slow natural

20 To invite means to
thank listen promise ask

21 Delighted means
true proud pleased beautiful

22 A dove is a
flower cloud bird queen

23 A huge thing is very
small strong dark large

24 To command is to
order answer destroy complete

25 A shelter gives
protection warmth food hope

26 When a train has left, it has
departed fallen hidden arrived

27 A heavy load is
firm large not light not soft

28 Children who assist in doing something are
helpful selfish greedy peculiar

29 When people look for something, they engage in a
game search march service

30 If something is small and pretty, it is
china dainty lace golden

31 A tree that is not standing straight is
slender powerful stooped slanting

32 A long stick carried to help one walk is a
handle staff club hammer

33 The things made in a factory are what it
produces purchases destroys extends

34 A vessel is a
bell basket boat lake

35 Something that can't be done is
difficult unusual assured impossible

36 Someone who does a job well likes to be
improved blessed nursed praised

37 One who always tries to get ahead has
temper authority ambition kindness

38 To divide means to
count take away separate figure

Stop.

No. RIGHT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Gr. score	13	14	15	16	17	18	19	20	22	23	24	25	26	27	27	28	29	30	31	32	33	34	35	36	38	39	40	41	42	43	44	47	50	52	56	60	67	71

TEST 3 *Spelling*

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____
21. _____
22. _____
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36. _____
37. _____
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39. _____
40. _____
41. _____
42. _____
43. _____
44. _____
45. _____
46. _____
47. _____
48. _____
49. _____
50. _____

No. RIGHT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
Gr. score	14	15	16	17	18	19	20	21	21	22	23	24	25	26	27	28	29	29	30	31	32	33	34	35	35	36	37	38	38	39	40	41	42	43	44	45	46	47	48	50	51	53	55	56	58	61	63	65	68	70

TEST 4 *Language*

7a

DIRECTIONS: In each pair of words in heavy type in the letter below there is an error in either capitalization or punctuation. You are to decide which one of each pair has the correct capitalization and punctuation. Then mark the answer space at the right that has the same number as the correct form.

SAMPLES: This is 1 mr. Jones. 2 Mr. Jones. ..... 1 2 ▌

3 St. Louis, Missouri 4 St. Louis Missouri 3 4

618 Maple 1 avenue 2 Avenue 1 2 1

Fenton, 3 Vermont 4 vermont 3 4 2

5 november 6 November 5, 1953 5 6 3

1 Dear aunt Mary, 2 Dear Aunt Mary, ... 1 2 4

I am now making 3 christmas 4 Christmas gifts..... 3 4 5

At school 5 we've 6 weve been having 5 6 6

1 fun, 2 fun. We gave a Halloween party..... 1 2 7

for our own 3 room, 4 room and the pupils in.... 3 4 8

Miss Allen's 5 room, 6 room. Before the party we 5 6 9

sent them a note which 1 said, 2 said "Please... 1 2 10

come to our room for a 3 surprise." 4 surprise. 3 4 11

Have you ever made a cross 5 jack-o'-lantern? 6 jack-o'-lantern. 5 6 12

One of ours had a turned-down 1 mouth, 2 mouth .. 1 2 13

and three sharp 3 teeth. 4 teeth 3 4 14

5 another 6 Another activity we enjoyed was..... 5 6 15

reading a book called 1 "bambi." 2 "Bambi." 1 2 16

We finished reading it 3 today. 4 Today. 3 4 17

I'll tell you 5 more, 6 more about it when I see you. 5 6 18

1 With love, 2 With Love, .. 1 2 19

3 jimmy 4 Jimmy 3 4 20

7b

DIRECTIONS: Each exercise below has two numbered parts. One part is written well and makes good sense. The other is written poorly. Choose the good one and mark the answer space which has the same number as your choice.

SAMPLE: 1 We'll go when you are ready. 2 We'll go. When you are ready. 1 2

1 Why he likes ice cream. 2 Why does he like ice cream? 1 2 21

3 The circus train carried lions. 4 A circus train with lions. 3 4 22

5 We went home after the game. 6 We went home. After the game. 5 6 23

1 We girls have regular jobs. Which we do each morning. 2 We girls have regular jobs which we do each morning. 1 2 24

3 Together we wash the dishes. 4 Together wash the dishes. 3 4 25

5 Both of us make our beds. 6 Afterward make our beds. 5 6 26

---

1 At the zoo one monkey had a nut which he was trying to crack. 2 At the zoo one monkey had a nut. Which he was trying to crack. 1 2 27

3 The other monkey chased him. To the top of the tree. And down again. 4 The other monkey chased him to the top of the tree and down again. 3 4 28

5 A third monkey sat in a corner. He watched the chase. 6 A third monkey sat in a corner he watched the chase. 5 6 29

---

1 Our class gave a program. When we finished our unit on "Pioneer Days." 2 Our class gave a program when we finished our unit on "Pioneer Days." 1 2 30

3 First a scene acted out in a log cabin. 4 First we acted out a scene in a log cabin. 3 4 31

5 Which our parents liked very much. 6 Our parents liked it very much. 5 6 32

1 The girls wore calico dresses. 2 The girls in calico dresses. 1 2 33

3 The boys wearing fringed jackets. 4 The boys wore fringed jackets. 3 4 34

TEST 4 *Language* (Continued) ◀8a ◀8b

DIRECTIONS: In each sentence, decide which of the numbered words is correct. Then mark the answer space at the right which has the same number as the word you have chosen.

SAMPLE: Apples 1 is / 2 are good. . . . . | 1 | 2 |

1 Them / 2 Those dogs just had a fight. . . . . | 1 | 2 | 35

The boys 3 aren't / 4 ain't ready yet. . . . . | 3 | 4 | 36

The 5 girls they / 6 girls asked me to come. . . . . | 5 | 6 | 37

Tom 1 did / 2 done his best. . . . . | 1 | 2 | 38

Where 3 are / 4 is the other boys? . . . . . | 3 | 4 | 39

Ann 5 brung / 6 brought her doll to school. . . . . | 5 | 6 | 40

Last night Bob 1 says / 2 said to me, "Go home." | 1 | 2 | 41

Where is my 3 book? / 4 book at? . . . . . | 3 | 4 | 42

He said that no bones were 5 broke. / 6 broken. . . . . | 5 | 6 | 43

We can't find 1 anything / 2 nothing wrong. . . . . | 1 | 2 | 44

I 3 knew / 4 knowed you would be late. . . . . | 3 | 4 | 45

Will you 5 take / 6 bring this book to Mary? . . . . . | 5 | 6 | 46

May all of 1 we / 2 us fourth graders go? . . . . . | 1 | 2 | 47

3 They're / 4 Their getting on the bus. . . . . | 3 | 4 | 48

Our teacher 5 doesn't / 6 don't scold us. . . . . | 5 | 6 | 49

Don't you think he may 1 of / 2 have left? . . . . . | 1 | 2 | 50

She put the vase down 3 careful. / 4 carefully. . . . . | 3 | 4 | 51

Give the kittens 5 their / 6 there milk. . . . . | 5 | 6 | 52

He 1 drawed / 2 drew some water from the well. . . . | 1 | 2 | 53

At school they 3 taught / 4 learned us spelling. . . . . | 3 | 4 | 54

The wind had 5 blown / 6 blowed all day. . . . . | 5 | 6 | 55

Did you 1 write / 2 right to your cousin? . . . . . | 1 | 2 | 56

One day I 3 ran / 4 run all the way home. . . . . | 3 | 4 | 57

Have you 5 a / 6 an eraser? . . . . . | 5 | 6 | 58

Sally had already 1 went / 2 gone home. . . . . | 1 | 2 | 59

They 3 theirselves / 4 themselves asked us to come. . . . . | 3 | 4 | 60

Everyone has 5 took / 6 taken a turn. . . . . | 5 | 6 | 61

Has Mr. Brown 1 spoken / 2 spoke to this class? . . . | 1 | 2 | 62

It's 3 real / 4 really cold outdoors. . . . . | 3 | 4 | 63

Nobody has 5 ate / 6 eaten his carrots. . . . . | 5 | 6 | 64

1 Let / 2 Leave Jane be first in line. . . . . | 1 | 2 | 65

There 3 were / 4 was nine men on the team. . . . . | 3 | 4 | 66

I hope 5 your / 6 you're well now. . . . . | 5 | 6 | 67

John's bicycle works 1 well. / 2 good. . . . . | 1 | 2 | 68

Mike is 3 laying / 4 lying on the couch. . . . . | 3 | 4 | 69

Why don't 5 we / 6 us girls play tag? . . . . . | 5 | 6 | 70

You haven't 1 rode / 2 ridden in our car. . . . . | 1 | 2 | 71

I don't know 3 whose / 4 who's turn comes next. . . . | 3 | 4 | 72

That man might have 5 stole / 6 stolen the ring. . . | 5 | 6 | 73

Did you and 1 me / 2 him eat lunch together? . . . | 1 | 2 | 74

Stop.

No. right ( ) × 2 ( )

No. omitted or double marked ( )

Sum ( )

Subtract 74

DIFFERENCE ----------

DIFFERENCE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Gr. score	below 10									10	11	12	13	14	15	15	16	17	18	19	20	21	22	23	24	25	26	28	29	30	31	32	33	35	36	37	38	39	40	42

DIFFERENCE (Cont'd)	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
Gr. score	43	45	46	48	49	51	53	55	57	59	61	63	65	66	69	71	73	74	76	78	80	83	85	88	92	97	102	109	above 110					

TEST 5 *Arithmetic Reasoning*

DIRECTIONS: Find the answers to these problems as quickly as you can. Write the answer for each problem on the dotted line at the right of the problem. In problems of buying, pay no attention to a sales tax. Use a separate sheet to figure on.

PART I

1 How many dolls are 2 dolls and 1 doll? ------

2 Helen has 4 boxes and Dan has 5 boxes. How many boxes have both children? ------

3 Bert caught 2 butterflies yesterday, 2 this morning, and 3 this afternoon. How many did he catch all together? ------

4 Bob sees 3 red apples and 6 green ones on the tree. How many apples does he see in all? ------

5 Mother bought 3 new dresses for Mary, 4 for Jean, and 2 for Alice. How many dresses did she buy all together? ------

6 There are 9 pencils on the desk. Jim takes 5 for his row. How many pencils are left? ------

7 Tom put 2 pennies in his bank one day, 5 the next, and 1 the next. How many pennies did he put in the bank in all? ------

8 We had 10 books on the table. There are 4 left. How many books have been taken away? ------

9 How many chairs have we in all? There are 14 at the front, 7 at the table, and 12 at the back of the room. ------

10 Ben found 13 shells and Ned found 6. Ben found how many more shells than Ned? ------

11 Ann picked 19 roses. She gave one dozen of them to a sick friend. How many roses did she have left? ------

12 Mike rode his bicycle 13 blocks the first day, 9 blocks the second day, and 22 blocks the third day. How many blocks did he ride all three days? ------

13 Two dimes and two nickels are how many cents? ------

14 A 2-ring circus has 8 monkeys in each ring. How many monkeys are there in the circus? ------

15 Louise gave away 35 stamps and had 57 left. How many stamps did she have before she gave any away? ------

16 Dan has 17 jacks and Joe has 8. Dan has how many more jacks than Joe? ------

17 Harry has 4 marbles and 3 balls. John has 2 marbles and 6 balls. How many marbles have the two boys? ------

18 Steve got 38 addition examples right and 24 subtraction examples right. How many examples were right all together? ------

19 A farmer had 137 sheep in a field. He put 42 of the sheep in his barn. How many sheep were left in the field? ------

20 Bill missed 23 air-rifle shots and hit 37. How many times did he shoot? ------

21 Father bought ice cream for 79 cents. How many cents in change should he get back from two half dollars? ------

22 Ruth has 24 lines to learn for the play. She says she will learn 4 new ones every day. At that rate, how many days will it take to learn all 24 lines? ------

23 Nancy had 7 feet of ribbon. She sold 1 yard to Jane. How many feet of ribbon did she have left? ------

Go on to the next page.

TEST 5 *Arithmetic Reasoning* (Continued)

24 How many cents will 6 boxes of breakfast food cost at 16 cents a box? ------

25 The 249 pupils of a school eat lunch in 3 different groups. If all three groups had the same number of pupils, how many would be in each group? ------

26 George gathered 184 shells at the beach. If he divides them equally among 8 of his friends, how many shells will each get? ------

27 The clerk says the cost of the meat is 61 cents. Betty gave him three quarters. How many cents should her change be? ------

28 The school library has 24 shelves. Sue counted 34 books on one shelf. If each shelf has the same number of books, how many books are there all together? ------

29 The cost of a new school flag was shared equally by 7 Scout troops of our school. The flag cost $3.85. How many cents was each troop's share? ------

30 Jane read 15 pages in her book in 45 minutes. That was an average of how many minutes per page? ------

PART II

31 Which month comes next after April? ------

32 Write the one of these which will buy the most: dollar dime nickel quarter ----------

33 Write the one of these that is used to show the cost of something:

pt. ¢ ft. lb. ------

34 What number is written under the space where Friday (Fri.) should be? ------

MAY						
Sun.			Wed.			Sat.
1	2	3	4	5	6	7

35 Here are some figures. Which number is in the square?

------

36 A foot is how many inches? ------

37 Which is the largest of these numbers?

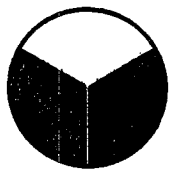
401 98 357 199 ------

38 Write *four hundred six* in numbers. ------

39 What number would come next after these three?

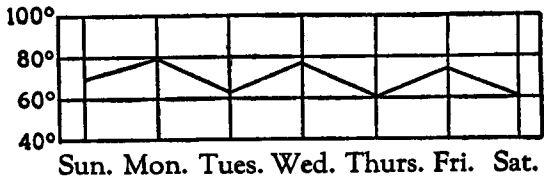
530 430 330 ? ------

40 Write *one-half* in numbers. ------



41 Write the fraction which tells what part of this circle is black. ------

42 This chart tells how hot it was one week. On which day was it hottest?



------

43 Which is the largest?

$\frac{1}{10}$ $\frac{1}{40}$ $\frac{1}{50}$ $\frac{1}{20}$ ------

44 One of these numbers tells you about how many inches the doorknob is from the floor. Look at the doorknob. Which of the numbers below tells best about how many inches it is from the floor?

3 12 24 36 ------

45 Write the Roman numeral XVI in figures. ------

No. right	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Gr. score	12	13	14	15	17	18	20	21	22	23	25	26	27	28	29	30	31	32	33	34	35	36	37	37	38	39	40	41	43	44	45	47	48	50	51	53	56	58	61	64	67	69	72	73	75

Stop.

TEST 6 *Arithmetic Computation*

DIRECTIONS: Look at each example carefully to see what you are to do. Do the examples and copy your answers in the column marked **"Answers"** at the right.

SAMPLE A

$$\begin{array}{r} 2 \\ +2 \\ \hline 4 \end{array}$$

SAMPLE B

$$\begin{array}{r} 6 \\ -1 \\ \hline 5 \end{array}$$

1

$$\begin{array}{r} 5 \\ +4 \\ \hline \end{array}$$

2

$$\begin{array}{r} 2 \\ +7 \\ \hline \end{array}$$

3

$$\begin{array}{r} 6 \\ -4 \\ \hline \end{array}$$

4

$$\begin{array}{r} 3 \\ +5 \\ \hline \end{array}$$

5

$$\begin{array}{r} 9 \\ -2 \\ \hline \end{array}$$

6 Add

$$\begin{array}{r} 4 \\ 3 \\ 3 \\ \hline \end{array}$$

7

$$\begin{array}{r} 4 \\ -2 \\ \hline \end{array}$$

8

$$\begin{array}{r} 26 \\ +41 \\ \hline \end{array}$$

9

$$\begin{array}{r} 76 \\ -23 \\ \hline \end{array}$$

10

$$\begin{array}{r} 79 \\ -34 \\ \hline \end{array}$$

11

$$\begin{array}{r} 25 \\ +84 \\ \hline \end{array}$$

12

$$\begin{array}{r} 28 \\ -5 \\ \hline \end{array}$$

13

$$\begin{array}{r} 94 \\ -34 \\ \hline \end{array}$$

14 $14 - 6 =$

15

$$\begin{array}{r} 3 \\ \times 3 \\ \hline \end{array}$$

16

$$\begin{array}{r} 249 \\ +432 \\ \hline \end{array}$$

17 $35 + 8 =$

18

$$\begin{array}{r} 128 \\ -86 \\ \hline \end{array}$$

19 $4\overline{)8}$

20

$$\begin{array}{r} 74 \\ \times 2 \\ \hline \end{array}$$

21

$$\begin{array}{r} \$3.76 \\ +6.50 \\ \hline \$ \end{array}$$

22

$$\begin{array}{r} 317 \\ \times 3 \\ \hline \end{array}$$

Answers

A 4

B 5

1 _____

2 _____

3 _____

4 _____

5 _____

6 _____

7 _____

8 _____

9 _____

10 _____

11 _____

12 _____

13 _____

14 _____

15 _____

16 _____

17 _____

18 _____

19 _____

20 _____

21 $_____

22 _____

Go on to the next page.

TEST 6 *Arithmetic Computation* (Continued)

23 $7 \times 9 =$

24 Add

$$\begin{array}{r} 179 \\ 57 \\ 903 \\ 65 \\ \hline \end{array}$$

25

$$\begin{array}{r} 323 \\ -276 \\ \hline \end{array}$$

26 $2\overline{)186}$

27

$$\begin{array}{r} 504 \\ \times 4 \\ \hline \end{array}$$

28 Add

$$\begin{array}{r} 4883 \\ 7886 \\ 4546 \\ \hline \end{array}$$

29 $48 \div 6 =$

30

$$\begin{array}{r} 308 \\ -279 \\ \hline \end{array}$$

31

$$\begin{array}{r} \$2.22 \\ -2.07 \\ \hline \$ \end{array}$$

32

$$\begin{array}{r} 410 \\ -364 \\ \hline \end{array}$$

33

$$\begin{array}{r} \$2.54 \\ \times 7 \\ \hline \$ \end{array}$$

34

$$\begin{array}{r} 64 \\ \times 61 \\ \hline \end{array}$$

35 $4\overline{)1220}$

36

$$\begin{array}{r} 46 \\ \times 60 \\ \hline \end{array}$$

37 $32\overline{)64}$

38

$$\begin{array}{r} \frac{1}{4} \\ +\frac{2}{4} \\ \hline \end{array}$$

39 $3\overline{)\$2.09}$

40

$$\begin{array}{r} 680 \\ \times 708 \\ \hline \end{array}$$

41

$$\begin{array}{r} 700 \\ \times 970 \\ \hline \end{array}$$

42 $68\overline{)1615}$

Answers

23 _____
24 _____
25 _____
26 _____
27 _____
28 _____
29 _____
30 _____
31 $_____
32 _____
33 $_____
34 _____
35 _____
36 _____
37 _____
38 _____
39 $_____
40 _____
41 _____
42 _____

Stop.

No. RIGHT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
Gr. score	10–	10	11	12	13	14	15	16	17	20	22	24	26	27	28	29	30	31	33	34	35	36	37	38	39	40	41	42	44	45	47	48	50	51	53	55	58	62	68	74	80	85